

PUBLIC EDUCATION
IN VIRGINIA

1928

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PUBLIC EDUCATION IN VIRGINIA

REPORT

to the

Educational Commission of Virginia

of a

Survey of the Public Educational
System of the State



By M. V. O'SHEA, Director

RICHMOND

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1928

PUBLIC EDUCATION IN VIRGINIA

Report to the Educational Commission of Virginia of a Survey of the Public Educational System of the State

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THE HISTORY OF THE AMERICAN REVOLUTION

should be submitted to a trial by a court martial, which will be held within a short time after his arrival at the place where he is to be tried.

He should be allowed to make his defense, and to call for witnesses, and to have all the time necessary for the preparation of his defense.

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CHAPTER I

LETTER OF TRANSMITTAL—AND EXPLANATORY

To MAJOR ROBERT T. BARTON, JR.,
*Chairman of the Commission to Survey the
Educational System of Virginia:*

Early in August, 1927, you requested me to serve as director of a survey of the educational system of Virginia. You stated that it was desired to have a study made of all departments of educational work in the State, including the higher institutions and negro education. You stated, further, that it was imperative that the report of the survey should be in your hands by December 1, 1927. I accepted your invitation, but with misgivings because of the very short period allowed for the completion of so large and important a task. I requested that the date for submitting the report be extended to March 1, 1928, but you replied that it was provided in the bill authorizing the survey that the report embodying the findings, conclusions and recommendations of the survey staff, together with the recommendations of your commission, should be printed and distributed to the members of the General Assembly by January 1st, and that the commission had no option in the matter.

Organization of the Survey Staff and Staff of Associates

Fully aware that I was entering upon a difficult undertaking, I, nevertheless, agreed to make an attempt to secure a staff of specialists to cooperate with me in the study of the Virginia educational system. You informed me that it was the wish of your commission that the members of the survey staff, who should be responsible for making recommendations to your commission, should all be chosen from outside of Virginia, but that it would be permissible and desirable to secure assistance in obtaining facts from capable persons within the State. With these instructions, I proceeded to select a group of specialists, each to become principally responsible for the study of one department of public educational work. At the outset it was thought that five or, at the most, six members of the staff would be adequate to make a comprehensive study of all phases of public education; but as the work of organization progressed, it became clear to me that on account of the complexity of the educational system in Virginia, and on account also of the limited time allowed for making the survey, it would be necessary to increase the membership of the staff, and this was done, with the result that when the field work was begun fifteen members of the staff had been selected. The personnel of the staff with the division of the survey assigned to each is given below.

As mentioned above, you stated that it would be agreeable to your commission if I would enlist the services as fact-gatherers of capable persons within Virginia. This I decided to do in order that the survey might comprehend not only the larger departments of educational work, but special phases also, and supplementary educational agencies as well. It would be impossible for the specialist in charge of the Division of Rural Education, for instance, to make a detailed study of the extent to which and how effectively home economics, say, was being taught in the rural schools of the State, and the same would be true of other special subjects and other departments of the educational system. So it became apparent that it would be desirable to secure the cooperation of a number of capable persons familiar with Virginia educational objectives and methods, each to be responsible for securing data regarding a particular subject or a special supplementary educational agency. In due course, I invited thirteen Virginians to assist in the survey, and each accepted the invitation and devoted himself whole-heartedly to the task assigned to him.

The members of the survey staff, together with those who assisted as associates, with the division or subject for which each was chiefly responsible, are as follows:

Survey Staff

DIVISION	PROFESSOR M. V. O'SHEA, <i>The University of Wisconsin, Director I—Elementary Rural Education.</i>
	PROFESSOR JULIAN E. BUTTERWORTH, <i>Cornell University. II—Elementary Education in Cities.</i>
	PROFESSOR F. G. BONSER, <i>Teachers College, Columbia University. III—Secondary Education.</i>
	PROFESSOR CALVIN O. DAVIS, <i>The University of Michigan. IV—Higher Education, Exclusive of Teachers' Colleges.</i>
	DEAN FREDERICK J. KELLY, <i>The University of Minnesota. PROFESSOR M. V. O'SHEA, The University of Wisconsin. PROFESSOR W. CARSON RYAN, Swarthmore College.</i>
DIVISION	V—Teacher Training, Supply, and Certification. PRESIDENT CHARLES MCKENNY, <i>State Teachers' College, Ypsilanti, Michigan.</i>
	PROFESSOR W. CARSON RYAN, <i>Swarthmore College.</i>
DIVISION	VI—Negro Education. DR. W. T. B. WILLIAMS, <i>Tuskegee Institute and Slater Foundation.</i>
DIVISION	VII—Educational Administration and Supervision. PROFESSOR C. J. ANDERSON, <i>The University of Wisconsin.</i>
DIVISION	VIII—Pupil Accounting, Compulsory Education, and School Records. PROFESSOR JOHN G. FOWLKES, <i>The University of Wisconsin.</i>
DIVISION	IX—Educational Finances. MESSRS. E. O. GRIFFENHAGEN AND ASSOCIATES, INC. (Edwin O. Griffenhagen, in general charge; James G. Robinson in immediate charge; and L. L. Rupert, Joseph B. Kingsbury and Alfred D. Simpson, members of the senior staff), <i>Washington, D. C., and Chicago, Ill.</i>

Associates

DIVISION	X—Special Topics and Supplementary Educational Agencies.
	(a) What Do the Citizens in Virginia Expect and Desire from the Public Schools and the Higher Educational Institutions? PROFESSOR WILLIAM R. SMITH, <i>The University of Virginia.</i>
	(b) Home Economics in the Public Schools. MRS. PEARL POWERS MOODY, <i>Harrisonburg State Teachers' College.</i>
	(c) Educational and Vocational Guidance in the Public Schools. DEAN CHARLES G. MAPHIS, <i>The University of Virginia.</i>
	(d) Physical Education in the Public Schools and Higher Institutions. SUPERINTENDENT R. C. BOWTON, <i>Alexandria, Va.</i>
	(e) Agricultural and Vocational Education in the Public Schools. PROFESSOR H. C. GROSECLOSE, <i>Virginia Polytechnic Institute.</i>
	(f) Health Conditions and Health Instruction in the Public Schools. DEAN JOHN L. MANAHAN, <i>The University of Virginia.</i>
	(g) Trade and Industrial Education in Virginia. MR. H. C. HOUCHENS, <i>Director Manual Training and Industrial Education, Richmond, Virginia.</i>

- (h) The Condition and Adequacy of Public School Buildings in Virginia.
DEAN KREMER J. HOKE, *William and Mary College.*
- (i) Libraries as Supplementary Educational Agencies in Virginia.
DIRECTOR WILSON GEE, *The University of Virginia.*
- (j) Music in the Public Schools.
MR. EDWIN FELLER, *President Virginia Music Teachers' Association, Norfolk, Va.*
- (k) The Cooperative Education Association of Virginia as a Supplementary Educational Agency.
DR. J. H. MONTGOMERY, *Executive Director, The Cooperative Education Assn. of Virginia.*
- (l) The Virginia Congress of Parents and Teachers as a Supplementary Educational Agency.
MRS. HARRY SEMONES, *President The Virginia Congress of Parents and Teachers.*
- (m) Social Factors in Rural Life as They Affect Education.
PROFESSOR WILLIAM E. GARNETT, *Virginia Polytechnic Institute.*

APPENDIX I—Tables and Financial Statements.

APPENDIX II—Samples of Questionnaires and Observation Forms Used in the Survey.

I should like to have you and your colleagues on the commission understand that it would have been impossible, in the circumstances, to secure fifteen members of the survey staff and thirteen associates if they had not all been greatly interested in the educational situation in Virginia. It was not possible to extend an invitation to any person to join the survey staff or the staff of associates until late in August. In my correspondence with you, it was agreed between us that it would be desirable, if it would be practicable at so late a date, to include in the survey staff only persons who had shown beyond question that they were familiar with present-day objectives and practices, each in the special field of education to which he would be assigned. It was agreed between us, further, that it would not be acceptable in Virginia to follow the plan which had been followed in some State surveys, of delegating field work to relatively inexperienced persons who would take the data they might secure for interpretation and recommendation to specialists who had not been in the State and who had not made observations at first hand. I informed you at the outset of our negotiations that I would not be willing to act as director of the survey unless each member of the staff would go to Virginia and study directly and concretely the problems assigned to him. This policy gave rise to serious difficulties. Men and women who had had experience in educational surveys and who would be capable of making authoritative studies of the educational work in Virginia had contracted obligations of various sorts for the period during which the survey would have to be completed. Most of them had charge of university classes, and it was too late in the year to find substitutes who could conduct their classes for several weeks while members of the survey staff would be required to be in Virginia. As a rule, members of a staff for State surveys are engaged at least a year in advance; but in the case of Virginia, the field work would have to be begun about the first of October—as soon as the schools and higher institutions had got well started in the work of the year—which allowed leeway of only a month for members of the survey staff to reorganize their programs so that they could cooperate in the survey.

I mention these circumstances because I am confident that you and your colleagues on the commission will appreciate the sacrifices made by the members of the staff in reconstructing their programs late in the year in order to participate in the survey. They would not have been willing to postpone or cancel other obligations in order that they might go to the State and perform the tasks assigned to them if they had not had extraordinary interest in Virginia.

General Method of Conducting the Survey

When the organization of the survey staff had been completed, all members began a study of Virginia educational history and of the economic, social and racial conditions which had to be taken into consideration in determining educational policies and practices in the State. The members of the staff made themselves quite familiar with the background of Virginia society and with the history and present organization and administration of the Virginia educational system before they began field work in the State.

In the study of Rural Education, Elementary City Education, Secondary Education, and Negro Education, it was decided that the specialist in each case should inspect typical schools in different sections of Virginia. Those who were responsible for the study of teacher-training institutions and the other higher institutions visited each of them and made first-hand observations. Those who conducted surveys of the administrative and supervisory work of the State, educational finances, pupil accounting, and the enforcement of the compulsory education law examined the data available in the various State offices at Richmond, and each one then went about the State to the extent that it was found necessary in order to verify data secured from the State offices or to inspect the actual operation of any plan or program or practice that was being investigated.

It is usual in State educational surveys to base conclusions and recommendations upon the observation of typical schools. Rarely has any State survey attempted to secure data of State-wide comprehensiveness in respect to any phase of the educational system; but in Virginia, data concerning programs and practices throughout the entire State were secured in respect to all of the division of public education and all of the special subjects and supplementary educational agencies that were studied. This was made possible through an extensive use of questionnaires as supplementary to personal visitation and inspection. There was gratifying response to these questionnaires from the educational people of the State to whom they were sent, and also from citizens and from alumni of the higher institutions, including the teachers' colleges. The people of the State can be highly complimented on the willingness they showed to devote much of their time for several weeks—educational people, particularly—to the task of supplying accurate data regarding their activities, the situation in the schools under their charge, and the results of the work being done in these schools.

You stated to me, when plans for the survey were under discussion, that it was not the wish of your commission that intelligence tests and educational measurements should be used. It was thought that educational policies could be studied and reported upon without making use of data secured from tests and measurements. You said that the funds appropriated for the survey were not adequate to provide for tests and measurements, even if more accurate knowledge of the educational work of the State could be secured by their use. The wishes of the commission with respect to this matter have been observed, with possibly one exception. It was desired during the survey to determine whether or not all of the students enrolled in the higher institutions possessed the type of intellectual ability required for the successful pursuit of college work as it is found in the Virginia higher institutions. In order to secure accurate data bearing upon this question, intelligence tests were given to freshman students in the higher institutions, not including the Medical College of Virginia or the teachers colleges; but further than this tests and measurements were not employed in the survey.

The Bernard B. Jones Fund

While it was agreed that it would not be desirable, or at least would not be expedient even if desirable, to employ tests and measurements in the Virginia survey, it was still imperative that extensive research should be conducted in order to secure facts concerning the operation of the various departments of the public educational system. The funds appropriated by the General Assembly were sufficient only to provide for the salaries and expenses of the fifteen members of the survey staff. There were no funds available for special research. I

presented the situation to Mr. Bernard B. Jones, of Washington, D. C., whose country home is in Berryville, Clarke county, Virginia, and he made an appropriation of \$2,500 and authorized me to use this to promote the work of the survey, and especially to provide for research work as supplementary to the field work of members of the staff and associates. This fund made it possible to conduct research in every division of the survey and in practically every special topic and supplementary educational agency. In addition, the fund proved to be adequate to pay the salary and expenses of one member of the survey staff. It made possible the engagement of many helpers in tabulating results of investigations and in assisting members of the staff and associates in various ways so as to economize their time and energy and set them free for field work or the organization and interpretation of the data that had been secured.

The Jeannes Fund

I wish to express my appreciation of the cooperation in the survey of Mr. John H. Dillard, president of the Slater and the Jeannes Funds. It was desired in the survey to make a thoroughgoing study of negro education in Virginia. It was decided that the best equipped man to undertake this work was Dr. W. T. B. Williams, of Tuskegee Institute, who is in the employ of the Slater and the Jeannes Funds. I explained the situation to Doctor Dillard and asked him to assign Doctor Williams to Virginia for the period of the survey. This was cheerfully done. Doctor Williams' salary was paid by Doctor Dillard from the Jeannes Fund, while his expenses were paid partly from the State Survey Fund and partly from the Jones Fund. During the progress of the survey, the director had a conference with Doctor Dillard from whom he gained enlightenment in respect to the problems of negro education.

Cooperation of the Educational People of the State

On behalf of the members of the survey staff and the associates, I wish to thank the educational people of the State, including the presidents of all the higher institutions, for their cooperation in furnishing data required in the survey. From the beginning to the end of the survey members of the staff and associates were received most cordially wherever they went in pursuit of information regarding one or another phase of educational work; and although heavy demands were made upon the time and energy of all those in charge of higher institutions, and rural, elementary, and high schools, no complaints were received from any one. On the contrary, members of the staff and associates received assurance throughout the survey from educational people in every section of the State that they would gladly do everything in their power to promote the success of the survey.

Special mention should be made of the service rendered by State Superintendent Harris Hart and all the members of his staff. Beginning in August, and continuing on until the survey was completed, Superintendent Hart and the heads of all the departments in his office gave unstintingly of their time and energy in furnishing information regarding programs and practices in the State. The staff were given free access to extensive data that had been collected and organized in the State Superintendent's office. Members of the State Superintendent's staff cooperated in preparing and distributing questionnaires, and in tabulating and organizing returns therefrom. It is due State Superintendent Hart and his associates to say that the survey staff and associates found the State Superintendent's staff unusually efficient in the collection and organization of educational data, and exceptionally well-informed regarding educational situations in every section of the State.

How Unity in the Survey Was Secured

The director of the survey discussed with each member of the staff and associates the problems to be studied in his special field and the method of studying them. The range of each member's study, and the data that it was desired he

should secure, together with the manner of organizing and interpreting the data, were agreed upon by the director and each member of the staff and associates. When the field work was begun, groups of members of the staff and associates came to Richmond and considered together the best ways to make their work accurate, comprehensive, and effective. When the field work had been in progress for a month, all the members of the staff and the associates convened in Richmond and each presented in substance his findings and his conclusions. These were discussed by all the members of the staff with a view to clarifying doubtful observations and softening too rigorous recommendations or strengthening those that were too pallid. These conferences lasted for several days, and at their conclusion each member of the staff and associates set about to secure additional data in his particular field if it was thought that he had not adequately covered the field. When each member had secured sufficient data for recommendations relating to his problems, he prepared a report and submitted it to the director, who was responsible for editing it, amending it, if any part of it was found not to be in harmony with the general conclusions reached during the conferences, and organizing it with all the other reports into the final report. The director then, on the basis of his study of Virginia education and the reports of each member of the survey staff and associates, prepared Chapter II, setting forth the distinguishing characteristics of Virginia education, and also Chapter III, presenting a constructive educational program for the State.

In concluding this letter of transmittal, I wish to express my gratitude to you for your helpful and generous cooperation from the beginning to the end of the survey.

Respectfully submitted,

M. V. O'SHEA, *Director.*

CHAPTER II.

VIRGINIA EDUCATION—A SUMMARY VIEW

In Divisions I to XI of this report there are presented detailed data concerning every department of the public educational system of Virginia. The material is so comprehensive and vast and some of it so technical that it has been thought desirable to show here in a summary way, for the benefit principally of those who do not have the time or the interest to study this report as a whole, what are the distinguishing characteristics of Virginia education and what is the educational status of Virginia in comparison with States having somewhat similar economic, racial, and social conditions, and also with all the States of the country viewed as a unity. In Chapter III there is presented a constructive educational program for Virginia. It will not be necessary, then, to do more in this chapter than to sketch in merest outline the main features of the educational system of the State, as these have been revealed by the studies of the survey staff, by way of furnishing an introduction to the recommendations in the following chapter.

Virginia Can Be Commended for the Educational Progress She Has Made During the Past Decade

Members of the survey staff have been favorably impressed wherever they have gone over the State with the attitude of the people toward problems having to do with the extension and betterment of educational work. Abundant evidence has been secured indicating that the present forward-looking educational attitude is due largely to the progress that Virginia has been making during the past few years. This advancement has been apparent in practically every department of the public educational system. It is not to be inferred from these statements that Virginia has yet attained to a position which places her on a par educationally with other States of the Union; that have been pushing ahead rapidly in material and social prosperity; but it may be inferred that the Virginia people are in a plastic and eager frame of mind in respect to the improvement of all types of educational work. The survey staff believe that the present moment is an auspicious one for Virginia education, because of the very frequently expressed wish of the educational people of Virginia that suggestions should be given them which may be of service in making their work better adapted than it has been to the needs of the Virginia people, and also because of the views expressed by many Virginia citizens—these views are summarized and commented upon in Chapter LX, Division X, of this report—that Virginia should develop a rural, elementary, secondary, and higher educational system which will be equal in comprehensiveness and efficiency to the educational system of any State in the Union.

Virginia Education Has Emphasized Culture and Refinement

In the course of their study of the Virginia educational system the survey staff have remarked upon the refinement and culture of the people with whom they have had relations. In how far these qualities have been nurtured by the educational work of the State and in how far they are the result of inheritance and of home training it is impossible to determine. It is probable, however, that all three factors have played a role in moulding the personal and social characteristics of the people. It is also probable that the social traditions of Virginia have tended to instill in the rising generation refined demeanor and considerate and gracious social attitudes. But the schools and colleges should undoubtedly receive credit for a share in cultivating estimable personal and social qualities in the youth of the State. The survey staff believe that this virtue of Virginia education can be retained while adding thereto qualities of resourcefulness and dynamic ability which are necessary for the rising generation to acquire in order that Virginia may be able to make adjustments to the new economic and social order which has been brought

about by the rapid development of the States with which Virginia is in competition and with which it is essential that she should keep abreast in material and social prosperity.

The Citizens of Virginia Entertain Widely Varying Views Regarding the Objectives of Public Educational Work

Reference has been made to the views expressed by leading Virginia citizens regarding the work which should be undertaken by rural, elementary, and secondary schools and the higher institutions. The reader is referred to Chapter LX, Division X, of this report for detailed data and discussion regarding the educational opinions of Virginia citizens, but it is desired here to say that a considerable proportion of the citizens who have responded to the request of the survey staff for a statement of their views is much in doubt regarding the aims which should govern superintendents, principals, and teachers in the conduct of educational work. It is evident to the survey staff that some of the citizens of Virginia think that the schools and higher institutions should do the same work today that they were doing fifty or a hundred years ago;—that is, that elementary schools should give instruction mainly in the “tool” subjects, that secondary schools should prepare mainly for college, and that higher institutions should provide a cultural and disciplinary education. But some of the citizens entertain a different view of what modern schools should accomplish. They say that the schools and colleges should prepare young people for the needs of daily life; that the subjects which are taught and the method of presenting them should be adapted to present-day conditions in Virginia. The survey staff think it appropriate in this connection to quote an expression received from one of the correspondents because his views are in accord with the views held by the survey staff. Speaking of the aims of the schools, he says:

“That they shall keep close to the people of Virginia; meet the needs that are peculiar to the State of Virginia; preserve the best of Virginia traditions and culture; develop Virginia resources, both human and material; build up the elementary and secondary school system by providing well-trained teachers and supervisors; prepare Virginia boys and girls for success in life; operate at as low a cost as is consistent with efficiency; avoid all waste as far as practicable, and duplication among themselves as far as it may be proved to be wasteful and undesirable; and work in harmony and cordial cooperation with one another, under the dictates of a State educational consciousness rather than of an institutional consciousness, so that all may be parts of a unified system in fact as well as in theory.”

In Virginia Education, Emphasis Has Been Laid Upon Culture and Mental Discipline Rather Than Upon Resourcefulness and Efficiency

As members of the survey staff have gone about the State in search of facts bearing upon the special problems which they have been studying, they have all remarked upon the amount of undeveloped land they have seen throughout the State. Hailing for the most part from States and having observed widely in many States in which the people are eager to make every acre of tillable land produce up to the measure of its possibilities, the members of the staff have been deeply impressed by the fact that a relatively small proportion of the land in Virginia is under cultivation. They have also commented frequently upon the absence from the State of industries that would be appropriate for Virginia and that could be operated in the State as advantageously, to say the least, as in neighboring or distant States in which these industries are flourishing. Further, the staff have noted that Virginia has not yet capitalized upon its superior scenic and climatic features. The staff believe that the explanation of these conditions can be found, partly but probably not entirely, in the predominant objectives and methods observed in every department of the Virginia educational system. Inspection of the instruction in classrooms in elementary and secondary schools, detailed reports of which will be found in the several divisions of this report, and a canvass of the objectives which determine the work of teachers in higher institutions, which are discussed at length in Division IV, have convinced the survey staff that the principal aims in all the schools and higher institutions are: (1), the attainment of culture, and (2) the

discipline of the mental faculties. While there are exceptions, it is still generally true that the educational work of the State is not designed to train boys and girls for an understanding of and efficiency in the real situations of daily life. Virginia education has emphasized *verbalism* and *symbolism* rather than *realism*. In the choice of subjects of instruction and in methods of teaching, the guiding principle has been and still is, to some extent, to store the mind with knowledge without reference to the application of this knowledge to the betterment of the material and social conditions in the State.

Virginia education, allowing for exceptions which will be made clear in the proper places in this report, is formal and static. The young people in the elementary and secondary schools, and to a large extent in the higher institutions, are not moved by the subjects taught, or the way in which they acquire them, or by the advice they have received to make use of the education gained at school and college in practical ways in agriculture, or in trades or industry, or in the making of homes. The rising generation, like the preceding generations, have learned school and college subjects quite largely in a memoriter way, assuming that education consists in the acquisition of facts, without intending to use them effectively to promote physical and social well-being. They have amassed knowledge on the theory that the mere possession of facts confers culture upon the one who possesses them. Virginia has been pursuing the educational policy, once followed in all Commonwealths but now largely abandoned by those that are making rapid progress in material and social betterment, that it is not as important to gain knowledge that can be utilized in every-day situations, physical and social, as it is to acquire and retain knowledge that does not bear directly upon any of the practical situations of every-day life. To repeat, this type of education was found everywhere throughout our country in an earlier day, but many States have discarded it more rapidly and completely than Virginia has done. This matter is of such fundamental importance that the survey staff wish to dwell upon it at the risk of seeming to be repetitious. Virginia education, taken as a whole but allowing exceptions, is not dynamic. It is not designed to make pupils either interested in or capable of dealing with the material or sociological conditions surrounding them. When young people emerge from school or college they do not feel an urge to deal with *realities*. This situation has existed for a long enough period to determine the attitude of the people of the State toward manual work, agriculture, vocations, trades, and industry. The so-called learned professions have been greatly exalted at the expense of any type of vocation requiring manual as well as mental activity. The profession that depends more largely than any other upon a classical, linguistic, and political type of mind and thinking has flourished most actively and successfully in Virginia. The legal profession, with which is coupled political interest and activity, occupies the first position both in the estimation of the people of the State and in the number and distinction of its votaries. The membership of the teaching profession is larger than that of any other profession, but it does not enjoy the prestige that the legal profession especially, but also the medical and the engineering professions, enjoy.

Virginia education, taken as a whole, has failed to develop interest and capability in *realism* as contrasted with *idealism* or *verbalism*—linguistic literary and oratorical. Pupils spend their time dealing with words and symbols rather than with the things to which they relate. In school and in college they employ the faculty of memory largely rather than scientific reasoning or creative imagination. They learn the contents of books and lectures, and in the classroom they recite verbatim. They do not solve problems in which their own originality and initiative are called into play; they do not undertake projects in which they are required to be dynamic. They regard too highly mere accuracy in recitation. They are principally receptive rather than active and executive. The exceptions to the rule are pointed out at the proper places in the data and discussion in the various divisions of this report.

Virginia Possesses Certain Advantages as Well as Disadvantages for the Development and Maintenance of an Efficient Educational System

An unusually large proportion, approximately 68 per cent, of the population of Virginia is native born of superior ancestry. This should enable the State to maintain an educational system of superior quality and efficiency in all departments. Virginia does not have to deal with the problem of educating people, adults as well as children, from foreign countries, where social, political and moral ideals and practices are very different from what they are in America, which is the case in a number of the States with which Virginia is in competition and with which she wishes to keep abreast in educational as well as in material and social progress. At the same time, Virginia has to maintain a dual educational system, which is a serious tax upon her material resources. Even so, it is imperative that the State should provide an educational program adapted to the varying needs of her entire population, negroes as well as whites, since an illiterate or miseducated group in the State will retard its development in every way—agriculturally, industrially, socially, and politically. The survey staff have found that a considerable proportion of the population of Virginia is growing up in illiteracy, while most of the States of the Union with which Virginia should keep abreast are making every effort to remove illiteracy completely, believing that it is a serious handicap not only to individuals, but more particularly to the State as a whole. Details regarding this situation are presented in several divisions of this report.

Virginia is Too Slowly Adopting a Program Suited to Its Needs

It should be stressed that the type of education which the survey staff have found to be prevalent in Virginia today was found everywhere throughout the country in earlier times. But many of the States have inaugurated a somewhat different kind of education which is designed to develop an interest in and capacity to deal with real, as contrasted with verbal and symbolic, objects and situations. The States that have adopted a dynamic educational program have advanced in material and social well-being more rapidly than Virginia has done in recent times. It is impossible to prove statistically that the States that have changed from a classic or verbal or static to a dynamic type of education owe their increased prosperity wholly or mainly to a realistic as contrasted with a formal or verbal or disciplinary kind of education, but the members of the survey staff believe that this is the case; and during the progress of the survey, eminent students of economic and social well-being and of education were asked to express their views concerning the relation of a modern dynamic educational program to the advancement of a State, and without exception they have said that in their opinion there is a direct causal relation between them.

Education in Virginia today is deeply tinged with the ideals of the education of an earlier day; but an education designed to discipline the mental faculties and to confer culture upon students was better adapted to the economic and social conditions in Virginia a hundred years ago than it is today or than it will be in the future. Nearly three-quarters of a century ago Virginia underwent a cataclysmic change in its economic and social order. It still feels the disastrous effects of this catastrophe. It has not been able to reconstruct its educational program so as to meet the changed conditions. The States with which Virginia is in competition economically and with which it wishes to keep abreast have gone forward in developing their material resources and in cultivating in the rising generations through a dynamic educational program an interest in realism and some capability in dealing with actualities so as to convert natural resources into products that have contributed to material advancement and comfort and social well-being. It is not that these progressive States have developed in their schools and colleges finished artisans or farmers so much as it is that the dynamic

type of education has awakened an interest in and has dignified agricultural and other pursuits requiring manual as well as mental activity. The attitude of the people in these prosperous States has been such as to encourage young people to devote themselves to realistic instead of or in addition to political and idealistic pursuits.

It is not the intention of the survey staff to recommend one type of education above another so far as theoretical values are concerned. But Virginia is confronted by a situation which should determine the type of education which should be most emphasized in its schools and higher institutions, regardless of the theoretical value of any type of education. Virginia formerly stood on a par, in everything that contributed to material welfare and prosperity, with sister States; and it stood ahead of most of them. But recently it has happened that the States that formerly looked up to it and regarded it as their model are not doing so any longer. They are, in fact, pushing ahead of it in material prosperity. Virginia is determined to maintain its position on a par with the most advanced States and as the leader of those that have not progressed so rapidly. Virginia is demanding for its citizens advantages which depend upon material prosperity. The State is not content to continue on an economic plane which would have been quite satisfactory fifty years ago, but which is not satisfactory today, partly because of the progress which has been made by many of the States of the Union during the last three or four decades. It is this fact—the need of Virginia to keep abreast of other States that are going forward in material prosperity so that it may provide for its citizens the advantages and comforts that are enjoyed by the citizens of other States—which requires that the prevalent type of education in Virginia should be modified in accordance with the recommendations that are made by the survey staff in succeeding chapters.

Virginia Education Does Not Adequately Stress Scientific Thinking

In Divisions I, II, III and IV of this report, data are presented which show that courses of study and methods of instruction in rural, elementary, and secondary schools, as well as in higher institutions, have not laid stress upon intellectual work requiring the tracing of cause and effect in nature and in human society. In the lower schools there has not been until very recently any study of nature, and there is only a negligible amount of such study now. In the higher institutions, science has occupied a subordinate place. So far as it has been possible for the survey staff to analyze the interests and modes of thinking of the people of Virginia, it appears that they are not, as a people, scientific minded. They are more political and literary minded. They are not interested primarily or even considerably in the advances that are being made in the application of scientific laws to the affairs of daily life. It is not intended to make dogmatic statements here regarding so complex and elusive matters as the interests and types of thinking which predominate among the people of a Commonwealth; but still it may be said with much confidence that the people of Virginia are not occupied in thinking according to cause and effect in natural situations to such an extent as are people in States in which there has been during the last three or four decades more rapid progress in the utilization of the forces of nature for the improvement of human well-being.

The habit of thinking in verbal instead of in causal terms is characteristic of pupils in the schools, not only in respect to nature, but equally in respect to human nature. Students in schools and colleges are engaged largely in the learning of words and symbols and arranging these in the patterns set forth in grammar, in arithmetic, in algebra and so on. And in the pursuit of history, civics and other subjects dealing with human nature and the relationships of people, they learn the contents of textbooks rather than trace out the laws that lie at the bottom of human behavior. They do not trace causes and effects in history and in human society today. This absorption of pupils in the schools and students in the colleges in verbal and

symbolic studies has been responsible, at least in part, for the establishment of interests and modes of thinking which have retarded the progress of Virginia when compared with States in which the schools and colleges have laid stress upon subjects and methods of instruction that have been adapted to foster interests and modes of thinking in accordance with natural law.

Virginia Has Been and Still Is Rather Lukewarm in Respect to Universal Free Education

Concrete and statistical evidence presented in the various divisions of this report show that Virginia does not consider it to be of vital importance that every child in the State should receive at least an elementary education. The survey staff have found that a considerable proportion of the children between the ages of six and fourteen is not in any school. They are growing up illiterate. If there is no school within easy reach of these children the compulsory education law is not applied to them. In certain places where the facilities are not adequate to care for all children of compulsory school age, some of the children are not in school because there is no room for them. This situation is due partly in all cases to the lack of adequate funds for school buildings and equipment, but it is due just as largely to the belief that education is not absolutely essential for individual or community well-being. In this respect, Virginia differs markedly from sister States that are pushing ahead rapidly in material and social prosperity. In this latter group of States—most of the States of the Union—earnest effort is being made to get every child of compulsory school age into school and to keep him there for eight or nine months every year, at least until he has completed the elementary school program. No expense or effort is spared in these States to locate children of elementary school age. No matter how remote children are from established schools, provisions are made to place them in school. There is no longer any question in these States of the advisability and the necessity of conferring at least an elementary education on all children, not only in justice to the children individually, but equally as a measure of protection for society. It is believed that an illiterate individual is a handicap economically and socially. But this view is not by any means universal in Virginia. The survey staff have found the people in some of the communities they have visited quite lukewarm toward free education for all children. If they were convinced that education is essential for the welfare of the individual and of the State, they would undoubtedly devise ways and means to provide at least an elementary education even for children living in remote localities.

The survey staff believe that the attitude of some of the people in Virginia toward universal compulsory education today is an inheritance from earlier days when the sociological conditions were different from what they are now. Seventy-five years ago the social order in Virginia was such that the welfare of the State and perhaps of the individual required that there should be a few social and political leaders, while the rest of the people should perform the manual work of the State. Seventy-five years ago community life in Virginia was comparatively quite uniform and simple. Only a small proportion of the people needed an education because there were no complex civic responsibilities devolving upon them and their social needs were extremely modest. Consequently, an educational program which provided for the education of those who would be called upon to govern the State was all that was necessary. Conditions have changed completely but educational policy has lagged behind.

In the States that have been pushing forward, there is little doubt respecting the advantages of universal free education for all the children. In most of the States that have advanced rapidly during the past few decades, the compulsory education period has been constantly extended, until now in some of them every child in the State must be under educational influences for at least part time until he is eighteen years of age. While it cannot be

proved statistically that there is a causal connection between the prosperity of a State and universal compulsory education covering the compulsory school period at least, still the survey staff and all the students of economic and educational problems which the staff have consulted are firmly convinced that the education, at least during the elementary school period, of *all* the children of the State, is essential to the prosperity of the State, and the recommendations relating to universal compulsory education presented in the following chapters are based upon this fundamental doctrine of the relation between education and the prosperity of a Commonwealth.

Rural Education is of First Importance in Virginia

Virginia is predominantly a rural State. It is shown in detail in Division I that the population of the State is found principally in rural sections. But rural education is inferior to urban education in Virginia in every essential factor. There are inadequate school facilities for rural children; educational equipment is inferior; the salaries paid rural teachers and their academic and professional training are below what is required in the cities. Supervision of rural education is defective. Virginia has made commendable progress in the last decade in the improvement of rural education, but it is still inferior to urban education.

In the Virginia rural districts, there are approximately 12.5 per cent more children of dependent age in proportion to the population than in the cities, and at the same time 12.5 per cent fewer adults of the productive age. Three out of every four of the school population of the State live in the country; but the value of rural school property is only \$30,160,195 as compared to \$24,686,040 for city school property. The annual expenditure for all the rural schools in the 100 counties is only twice as much as that for the twenty-three cities with one-fourth as many children—or \$17,285,382 as compared to \$8,789,270.

The course of study in rural schools is not as well adapted to the needs of the rural population as it can and should be made. For the most part, it has but slight direct relation to the conditions and needs of rural life in Virginia. It is not intended to say here that rural education should be restricted wholly to rural conditions and rural needs; but the survey staff believe that Virginia is not keeping abreast of the States that are going forward rapidly in the promotion of material and social well-being in the adaptation of rural education to the situations and problems with which the rural population have to deal in every-day life. The rural schools are, to some extent, educating rural children away from rather than developing enthusiasm for rural life.

Urban Elementary Education in Virginia is, Speaking Generally, Not as Well Adapted to Modern Needs as it Should and Can be Made

Detailed data and discussion of this matter will be found in Division II of this report. The survey staff believe that it is of fundamental importance for Virginia to develop a system of elementary education which will train pupils to be resourceful, dynamic, and aggressive in the solution of problems in every-day life. Elementary education in the State is still too largely influenced by the objectives of formal mental discipline and formal culture. The curriculum of the elementary schools needs to be modernized so that there will be eliminated therefrom all topics and subjects which cannot, except in rare cases, be functional or useful in the daily lives of Virginia people, either in their relations to nature or to one another. In most of the States of the Union elementary courses of study are being modernized with a view to discarding all topics or branches that have ceased to be of functional or practical value in the every-day life of people in the communities in which the schools are located. Upwards of 300 cities in different States are banded together for the purpose of working out programs of elementary

education in which only materials that will probably be utilized by pupils in their daily lives outside of school will be included; all merely formal subject matter is being eliminated from courses of study. It is imperative that Virginia should keep abreast of this movement and should delete from elementary public schools all topics and branches that have persisted in the curriculum from an earlier day when it was thought that the purpose of education should be the formal discipline of the mental faculties. This conception of education has been or is being abandoned in all progressive States. The educational leaders and the teachers of Virginia should enter upon a program, as outlined in several divisions of this report, designated to promote investigation and discussion of the elementary school curriculum with a view to curtailing mere formal studies and enriching the curriculum by the addition of branches that deal effectively with the physical, social, and political conditions in Virginia.

Pupils Are Not Classified According to Ability in the Elementary Schools of Virginia

It is unfortunate that little or no provision is made in the elementary schools of the State for the classification and gradation of pupils according to their ability to accomplish school work. Very capable pupils are kept in the same classes with pupils who ought not to be in the regular school at all because they do not possess the mental qualities necessary to keep abreast of their classmates in their work. The survey staff have not applied intelligence tests, but from their inspection of the schools they feel assured that a considerable percentage of pupils possess very meager mental ability of the kind involved in the sort of work that is found in the Virginia elementary schools. When these backward pupils are kept in classes with very bright pupils, they retard the progress of the latter; they make it impossible for pupils of average or superior ability to do work up to the level of their capacity. It is highly important that Virginia should make provision as rapidly as possible for special schools to take care of those pupils who are markedly below normal in the type of mental ability that is required for the successful accomplishment of school tasks. Also, the plan of sectioning classes so as to secure the grouping of pupils according to ability should be adopted in all Virginia schools.

Members of the survey staff have been impressed with the number of over-age children they have observed in the public schools. Details concerning over-ageness are presented in Divisions II and VIII; but it may be said here that over-age pupils are a serious handicap in any class, and it is doubtful whether they receive from the schools benefit equal to the harm they suffer in being classified with pupils younger and smaller than they are themselves. Modern schools regard it as highly important to provide special classes for pupils who, for one cause or another, have been retarded in their progress.

Supervision of Elementary Education Can Be and Should Be Improved

It has been said in another place that expert supervision is a necessity in Virginia schools. This applies to elementary schools in cities as well as to rural schools. The survey staff believe that supervision pays and that it should be extended and perfected in the elementary schools. Data relating to the existing situation are presented in detail in Divisions II and VII of this report. It is shown therein that the number of supervisors of elementary education should be increased and that their training should be improved, to the end that they may be of genuine help to teachers who are in need of advice and guidance.

Textbooks in Virginia Elementary Schools, Rural and Urban, Are Not in All Cases Well Adapted to the Needs in Virginia

The textbooks in Virginia are uniform and may not be changed until the end of an adoption period. A change cannot be made in the present textbooks until June 30, 1930. It is imperative that a committee of educational people should be constituted in every community to make a study of textbooks with a view to recommending the adoption of texts that are prepared from the modern standpoint. Virginia elementary schools cannot serve their pupils most efficiently if textbooks that are based on formal, memoriter methods of instruction must be used in the schools. The persons charged with responsibility for the adoption of textbooks should receive counsel from the teachers of the State and should profit by investigations of textbooks that have been made in States that are progressing rapidly in educational work. Before the next adoption of textbooks—in 1930—those who will select the texts should make a thoroughgoing canvass of the views of teachers based on their experience in the use of books on the present list of adoptions.

The Question of a Seven-Year as Compared with an Eight-Year Elementary School Program should be Thoroughly Investigated

The survey staff have found that in some communities in the State there is a seven-year elementary school and in other communities an eight-year school. The staff have endeavored to determine whether graduates of the eight-year school are advanced one year in educational achievement beyond graduates of the seven-year school. This is a very important problem for Virginia to solve. The staff have not been able to secure adequate data to answer the questions—Can as much of genuine educational work be accomplished in a seven-year elementary school as in an eight-year school? Are pupils who graduate from a seven-year school and who complete a high-school course as far advanced educationally in the senior year of the high school as graduates of an eight-year school? Some data bearing on these questions have been secured from Roanoke, Petersburg, and Staunton, but they are not adequate to yield final answers to the questions. The staff have examined the results of intelligence tests and educational achievement tests given to high-school seniors in Roanoke, in which there is an eight-year elementary school, and in Petersburg and Staunton, in which there are seven-year schools. Groups of senior pupils in these three cities have been equated as to intelligence quotients and they have then been compared with respect to their status in educational achievement. Tables presenting the results of these comparisons will be found in Appendix I of this report. It is shown therein that pupils in the senior class in the Roanoke high school, who have had the advantages of an eight-year elementary school, range slightly but not markedly ahead of seniors in the high schools of Petersburg and Staunton.

The educational status of seniors in the high schools in these three cities is so close together that the survey staff regard it as exceedingly important that investigations should be conducted throughout the State, extending over a considerable period of time, in order to determine whether the benefits of an eight-year course in elementary schools are sufficiently great to warrant the continuance of the eight-year plan. The survey staff suggest that the Research Division in the office of the State Superintendent of Public Instruction should be charged with the responsibility of securing and disseminating accurate information relating to this matter. Comparison should be made of the educational achievement of pupils who are equated in respect to intelligence rating and who can be equated also in respect to the efficiency of their instruction in the elementary school in order to determine whether an additional year in the elementary school produces measurable benefits as shown at graduation from the elementary school and also in the senior year in the high school.

Virginia Has Only Recently Inaugurated a State System of High Schools

Formerly in Virginia, as in other Commonwealths, secondary education was strictly private. Secondary schools were then preparatory schools solely. It was considered in an earlier day that no boy or girl should undertake a secondary-school course who did not intend to enter college. This view of the function of secondary education persisted in Virginia longer than in most other Commonwealths. The belief is still held by many people of the State that a high-school education should not be provided at public expense. Free high schools are not yet found in some communities; if high schools exist in such communities, pupils who attend them pay tuition fees. The survey staff have been told rather frequently by citizens of Virginia that the State ought not to pay the expenses of a high-school education for any pupil.

Taking the citizens as a whole, however, they favor a public free high-school system for the State as they have testified in a canvass made by the survey staff, the results of which are presented in Chapter LX, Division X, of this report. When the State entered upon the public high-school program, many small, weak schools were established in close proximity to each other, and it is now being found that some of these schools cannot be maintained properly. A vigorous program of consolidation of small high schools is going forward in some sections of Virginia, and this can be heartily commended for all sections of the State.

However, the policy of consolidation is working a hardship for some pupils who reside in localities remote from a consolidated school. The survey staff have found communities which cannot provide free transportation for pupils who live beyond walking distance of a consolidated high school. It will be necessary for such communities to have State aid in the transportation of high-school pupils.

The Program of Work in Virginia High Schools is Too Largely Restricted to College Preparatory Subjects

The Virginia high schools are still too largely preparatory schools for college. Speaking generally, they do not provide courses of study adapted to the needs of pupils who will not enter liberal arts or technical colleges. In other Commonwealths that are advancing in material and social prosperity, high schools are regarded as "people's colleges." Pupils receive a training in them not only for entrance into college, but also for entrance into industry, trades, and vocations, including homemaking. The survey staff have found high schools throughout Virginia that offer no work which is not designed as a preparation for college work. This must be regarded as very unfortunate.

The methods of instruction practiced in the Virginia high schools, taken as a whole, show the effect of the belief that the sole function of a high school is to prepare for college or to confer culture or mental discipline upon pupils. Teaching in these high schools consists largely in assigning tasks in textbooks and questioning pupils to see whether the tasks have been learned verbatim and retained. Comparatively little work has been observed by the survey staff which shows that teachers are seeking to develop in their pupils resourcefulness, originality, and a dynamic attitude in dealing with the problems which they will encounter outside of the classroom.

The survey staff believe that the program of any public high school should be determined by the needs of the community in which the school is located. Higher institutions should adjust their programs to secondary programs that seem best adapted to prepare boys and girls for the needs of daily life.

Pupils in the high schools of Virginia should become imbued more than is the case now with modern scientific ideas, methods, and progress. It has been said elsewhere in this chapter that the chief need in Virginia today is

the adoption of a scientific temper and attitude toward the problems of daily life. The advancement of the State, and also the welfare of the individual, require that the people should become concerned more with *realities* than with words, symbols, and abstractions, so that they can deal with the actual material and social problems of every-day life. In order that this end may be accomplished, the high schools of Virginia must train their pupils in scientific thinking. They have been and still are trained too largely in linguistic and symbolic thinking. High schools should encourage their pupils more than they have done in the past to pursue courses in science. These courses should not present the abstract or mathematical aspects of science, but rather the functional and applied aspects. Virginia high schools should endeavor to prevent any pupil from completing a high-school course who has not become imbued with *realism* as contrasted with verbalism and symbolism.

Foreign languages absorb too much of the time and energy of teachers and pupils in the high schools of Virginia. The people of the State do not have opportunity to use foreign languages to any appreciable extent—pupils do not have need for the foreign languages which they study in high schools. If Virginia were better situated economically, so that a considerable proportion of young people could easily spend four years in the study of subjects remote from the problems of daily life, the study of linguistic and symbolic studies might be continued; but in view of the situation which actually exists in the State, emphasis in high schools should for a considerable period be put upon realistic rather than upon linguistic studies that cannot be functional in the daily life of a Virginian.

The Virginia High Schools Have No Guidance Program

When pupils in a high school have no goal in view except to enter college it is not very necessary that they should be advised regarding the types of work for which they are best adapted by nature and the opportunities for employment after graduation, but a large proportion of pupils in the high schools of Virginia should not enter liberal arts or technical colleges. They should enter vocations. In order that they may choose vocations wisely, it is imperative that they should have advice during their high-school course from persons competent to diagnose their abilities and to direct them into vocations for which they are best fitted and in which there is need for their services. It is shown in Chapter LXII, Division X, of this report, that at present there is practically no guidance given pupils in the high schools of Virginia, though it is also shown that the school authorities of the State think that a guidance program should be instituted in the schools as rapidly as circumstances will permit.

When the work of a public free high school is conducted principally for those who plan to enter the liberal arts or technical colleges, it is almost certain that the work will not be adapted to the interest or needs of a considerable proportion of the pupils. This is the situation in Virginia high schools. Many of the pupils are either not interested in or not capable of intelligently pursuing courses which they are required to pursue, especially in the freshman year.

The Standard of Thoroughness and Scholarship in the Virginia High Schools should be Raised

There are exceptions to the rule, but it is, nevertheless, the rule that the work in the high schools is too superficial. Pupils are permitted to pursue too many subjects at one and the same time. The guiding aim in such cases seems to be for pupils to rush through the high school in order to acquire the social and economic advantage of a high-school diploma or to get into college, even though they are but meagerly equipped to undertake college work.

It would be of advantage to the intellectual work of Virginia high schools if a larger proportion of men teachers was employed. The people of the State have heretofore regarded teaching as suitable mainly for women. As speedily as possible this view should be changed and the social as well as the economic status of the high-school teacher should be improved, so that men as well as women will enter the profession of teaching and seek positions in the high schools.

The Movement in Virginia to Improve the Academic and Professional Preparation of High-School Teachers can be Heartily Commended

The survey staff have been gratified to observe that high-school teachers of Virginia are encouraged to use the summer vacation for professional improvement. The summer session in the higher institutions of the State are planned mainly for the needs of teachers who wish to extend both their academic and their professional training. Local boards of education should encourage this practice by contributing to the expenses of teachers who spend their vacations in professional improvement. This policy is being adopted in other States with encouraging results.

The survey staff have found that the position of principal of a high school is increasing in dignity and importance. This position requires high personal qualities as well as extensive academic and professional accomplishment. The policy has not yet become established in Virginia for boards of education to assist principals of high schools to keep abreast of educational progress by attending educational meetings, where modern educational movements are discussed, and also by spending a part of the long vacation in study or in travel for the purpose of observing advancement being made in secondary schools in progressive Commonwealths. This policy is being followed by boards of education in many Commonwealths with which Virginia wishes to keep abreast in her educational as well as in her material and social development. In many other States, boards of education are offering bonuses to teachers and principals who make commendable efforts to improve their academic and professional preparation for teaching, and this policy can be commended for Virginia.

The Higher Institutions of Virginia Are Not Adequately Supported

Virginia has not been lavish in her gifts to the higher educational institutions. Quite the contrary is true, in fact. The higher institutions are impoverished, compared with institutions of similar grade and importance in the more prosperous States, and even in some States that until recently have been quite inferior to Virginia in material resources. Elaborate and convincing data supporting this statement will be found in Divisions IV and IX of this report.

The survey staff have been much impressed by the fact that Virginia has acquired valuable physical plants for higher education in several places with but slight State investment; the physical plants of the University of Virginia and the College of William and Mary especially have been secured largely from private gifts. In view of this fact, the State should be as liberal as possible in contributing funds to the higher institutions for maintenance. However, in comparison with funds appropriated for the maintenance of higher education by most of the States with which Virginia wishes to keep abreast, Virginia has contributed only very meagerly. Detailed data relating to this matter are presented in Divisions IV and IX of this report. Taking all the facts together, Virginia has elaborate facilities for higher education for which it has paid for plants and equipment only a negligible sum when compared with the outlay that has been made by most other States.

New Times Have Brought New Problems to the Higher Institutions

It has been said to members of the survey staff many times that the higher institutions of Virginia are costing the State more today than they did formerly, but that the product they are furnishing the State is not superior, and, in fact, is probably inferior, to the product that came from these institutions years ago. Virginia people overlook the fact that during the last twenty-five or thirty years throughout the country the situation affecting higher institutions has changed completely. A quarter of a century ago few, if any, of the State universities in the Middle West and the Far West had attained distinction in the educational world. The University of Virginia enjoyed a prestige then which was not equalled by many and was not excelled probably by any universities in the country. Distinguished scholars and teachers were easily attracted to the university then because of its prominence among educational institutions. But about twenty-five years ago a number of the State universities throughout the country entered upon a career of extraordinary development, the like of which has never been equalled in any country. Most of these universities have now attained to an enormous size, both in physical plant and in student body. They have, compared with the University of Virginia, almost unlimited resources. The salaries paid members of the faculties of these institutions is, speaking generally, much higher than the salaries of the faculty of the University of Virginia. Convincing detailed data bearing upon this matter are found in Divisions IV and IX of this report. These newer universities can go to the University of Virginia and entice away almost any teacher because they can offer financial inducements in the way of salaries, perquisites, clerical assistance, funds for research, and so on, which are beyond the range of the University of Virginia so long as its present salary scale and other standards are maintained. The University of Virginia, in common with other higher institutions of the State, cannot retain the services of distinguished teachers, except in rare cases, in which loyalty to the institution is stronger than great temptations offered by other institutions; and loyalty cannot be counted upon to hold members of the faculties indefinitely. The higher institutions cannot attract new teachers of ability and distinction because of the competition of the great State universities to the North and West, and even to the South now, that have from five to twenty times the resources of the University of Virginia and other Virginia institutions, and that are constantly looking about for capable teachers to replenish and enlarge their faculties. They can attract any new teacher away from any institution in Virginia.

In Divisions IV and IX of this report plans are outlined for the purpose of meeting the grave situation which now exists in the Virginia higher institutions. It will be enough to say here that, unless Virginia can take account of and can act on the fact that the higher institutions are competing with a large number of institutions throughout the country that have far greater resources than the Virginia institutions have at present, the latter will inevitably become mediocre colleges, simply because colleges in other States will draft off their more capable teachers and will make it impossible for them to secure superior new teachers. They will also draft off the more desirable students, who will inevitably seek institutions in which they can find the most inspiring teachers and the best equipment and facilities for the education which they seek. This has happened in other States and must certainly happen in Virginia if the present situation is continued, and the most promising youth of the State, whose affection and loyalty for the State ought to be retained, will be alienated from the State by being educated in higher institutions outside of the State. Virginia must make its own higher institutions as attractive as the institutions in competing States that are making a bid for the more capable young men and women from every section of the country.

Liberal Higher Education for Women Has Not Been Provided on a Par with Liberal Education for Men in Virginia

In an earlier day it was believed in Virginia that State-supported higher education should be provided solely for men. Not until the State took over the College of William and Mary were women enabled to pursue liberal arts courses on the same basis as men. However, even at the College of William and Mary provisions are not adequate for the number of women who are seeking a liberal collegiate education. By practice, if not by statute, the proportion of women students at the college is kept below that of men—only 45 per cent of the students may be women. The survey staff have learned that a large number of women applicants for admission at the College of William and Mary for the year 1927-1928 were rejected because the quota of women had been filled.

Women are not admitted to the college of liberal arts at the University of Virginia and are not admitted at all to the Virginia Military Institute. They are admitted only to a limited range of work at the Virginia Polytechnic Institute. The survey staff have listened to petitions from distinguished women of Virginia praying that the recommendation should be made that women be admitted upon a parity with men to all the courses at the University of Virginia. The survey staff have agreed that the request of women to be admitted to State educational institutions without discrimination as compared with men is an entirely fair and reasonable request; but it is not considered to be desirable for women to enter the college of liberal arts at the University of Virginia because of the long non-coeducational history of this college and of the attitude of its alumni toward the question of co-education. The maintenance of the college of liberal arts at the University as a college for men only has, in the view of the survey staff, produced certain results, principally in the development of an admirable honor system, which are of so great importance that it would not be wise to jeopardize their continued existence by changing the fundamental character of the college of liberal arts. Recently, certain professional courses at the University have been opened to women of junior standing. It is improbable that even if women were admitted to all liberal arts courses, they would find their life and their work entirely congenial. The staff believe that the desire of women for a liberal education on a par with men can be gratified in a happier and more satisfactory way than by entering the college of liberal arts at the University; and this way is pointed out farther on in this chapter.

The survey staff wish to emphasize the fact that the States of the Union which have made rapid progress in social and material prosperity have granted unrestricted privileges to women in State-supported public educational institutions of collegiate or university rank. It is probable, though it cannot be statistically proved, that there is a causal connection between the liberal higher education of women and the social and material advancement of a State. It cannot be doubted that the women of Virginia will in increasing numbers seek the advantages of a higher liberal as well as professional education on the same terms as men. The proportion of women in State-supported institutions of higher grade has been continually increasing during the past two decades, and there can be no doubt whatever that this movement will continue. In the judgment of the survey staff, the situation in Virginia will not be different from what it is now in States in which women are taking advantage of all the provisions for public higher education. If Virginia does not provide facilities for women on the same basis as it has for men, in the future there will be disturbing social discontent. It is, therefore, recommended by the survey staff that either the College of William and Mary be opened without reservation to women in preference to men, in the measure that women of proper preparation seek admission until the limit of its resources is reached; or that the Harrisonburg State Teachers' College be converted into a college of liberal arts for women coordinate with the college of liberal arts at the

University of Virginia. The details of these plans are presented in Division IV of this report.

Military Education of Collegiate Grade is Over-Emphasized in Virginia

The Virginia Military Institute has played a very important role in the civic, political, and educational life of Virginia and the entire South. Many of the most distinguished military as well as civic leaders of Virginia and of the nation have received their education at the institute. But the need for the particular type of education which is found at V. M. I. has largely passed. The liberal arts work can be done somewhat better at the University of Virginia and the College of William and Mary, and the engineering work can be better done at the Virginia Polytechnic Institute. The military mode of life at the V. M. I. affects the character of the educational work so that it is more formal, conventional, and static than is needed in Virginia today. In an earlier day, when education was merely disciplinary, the V. M. I. formal educational regimen was quite satisfactory; but it has already been pointed out that Virginia is in need today of a dynamic type of education which cannot be conducted most efficiently under the conditions made imperative by the military mode of organization and conduct. If the State of Virginia were adequately supporting rural, elementary, secondary, and higher education of a modern type and if it had abundant resources to meet all educational needs, none of which is true, then it might perhaps continue to appropriate funds for the education of men at the Virginia Military Institute; but in the circumstances it is not educationally justifiable for the State to continue to make the appropriations it has been making for education at V. M. I. So long as there are children in Virginia of elementary school age who are growing up in illiteracy because there are not adequate provisions for their education, and so long as the State is not making proper provision for the higher education of women, and so long as the University of Virginia, the College of William and Mary, and the colleges for the training of teachers are inadequately supported so that they cannot perform the tasks properly falling to them up to a reasonable standard, Virginia should not continue to appropriate funds for the maintenance of students at the V. M. I., when they can be cared for very well at other State-supported higher institutions.

If it be maintained that military education is essential to the training of men in obedience and respect for authority, then it may be pointed out that, while this result was obtained in an earlier day, it cannot be obtained to such a degree under present-day conditions. The social situation in Virginia today does not foster in the cadets at V. M. I. respect for military discipline such as was encouraged in an earlier day. During the last twenty-five years in Virginia, as in most of the other States of the Union, the ideal of personal freedom and initiative has developed with extraordinary rapidity. Everywhere now young men and women are stimulated to take the management of their affairs largely in their own hands—to take the initiative and to be self-active in planning and executing their education as well as their other programs. This is the temper of American life today, in Virginia as elsewhere, and it is affecting the attitude of cadets at the V. M. I. During the period of the survey, nine cadets were dismissed from the institute for infraction of a rule regarding hazing, whereupon the entire student body went out on a strike in protest against the action of those in authority. The survey staff made inquiry and could not learn that hazing is practiced in other higher institutions of Virginia or that the student bodies have, in recent times, if ever, gone out on a strike in protest against the action of those in authority. This is further evidence that military education of collegiate rank in a State-supported institution is not best adapted today to develop respect for authority and obedience to rules established by those in authority.

Military training is enforced at the Virginia Polytechnic Institute and this is adequate for the needs of the State under present conditions. The

Federal government provides facilities for the training of military officers; and the State of Virginia, considering its educational finances, should delegate the higher military training of its sons who wish it to the Federal government. It should, however, not neglect to continue to provide for military training at V. P. I., but the educational regimen of the latter institution should not be militarized.

The Collegiate Type of Education is Over-Emphasized as Compared with Vocational Education

The survey staff have made tests to determine the intellectual status of freshmen in the University of Virginia, the College of William and Mary, the Virginia Military Institute and the Virginia Polytechnic Institute. The data are presented in Division IV of this report. It is shown that there are students who do not possess the type of intellectual ability which is needed for the completion of intellectual work of the kind found in these institutes. It is highly probable that a considerable proportion of students in all the institutions of collegiate rank in Virginia do not possess the particular kind of mental ability necessary to attain a reasonable standard in college work of a linguistic, symbolic, and abstract character. Shall such students be prevented from entering colleges in which the liberal arts type of work is predominant? Arguments relating to the matter are presented in detail in Division IV; it will be enough to say here that Virginia should immediately institute a system of vocational and educational guidance in junior and senior high schools and higher institutions with a view to advising young people regarding the type of work for which they are best adapted by nature. The situations in respect to vocational guidance is shown in detail in Chapter LXII, Division X, of this report; and the reasons why a guidance program should be established in high schools and colleges are presented in detail therein. Such a guidance program is required not only for the purpose of preventing students from attempting in liberal arts colleges a kind of intellectual work for which they are not fitted, but more especially to provide guidance for those who for economic reasons cannot go to college but who must enter a vocation or industry or trade upon completing a junior or senior high-school course. Virginia is not caring adequately for its young people who are not able to undertake collegiate work.

Duplication of Work in the Higher Institutions is More Apparent than Real

Wherever members of the survey staff have gone throughout the State in pursuit of information relating to the efficiency of the educational system, they have heard citizens complain about the needless and wasteful duplication of work in the higher institutions. On account of the State-wide belief that many of the courses in all the collegiate institutions could be eliminated without loss to the higher educational work of the State, members of the survey staff gave special attention to this matter in their inspection of the higher institutions and in the examination of statistical data regarding the size of every class in every institution. Detailed data relating to size of classes are presented in Division IV of this report. It is shown therein that in the University of Virginia, the College of William and Mary, and the Virginia Polytechnic Institute there are a number of classes for undergraduates that are very small,—some of them having less than five students. In most of the major subjects of instruction the enrollment in each class was as large as it should be; if a greater number of students had enrolled for these classes it would have been necessary to organize separate classes for them. It cannot be said that work is duplicated in the University of Virginia and the College of William and Mary, say, in subjects in which classes are as large as they should be in both institutions for efficient teaching.

It would be feasible and desirable for the administrative officers of the higher educational institutions to adopt a policy of refusing to continue a class of undergraduate work when the enrollment is less than ten for three consecutive semesters. Following this policy, duplication of work in the higher institutions could be largely eliminated, and a number of classes would be discontinued.

It should be noted in passing that the University of Virginia could absorb an additional number of undergraduate students, as many as are enrolled from Virginia at the Virginia Military Institute, if living quarters could be provided for them. In the proper place, recommendations are made covering this need. Reference is made to the matter here because later in this chapter a suggestion will be made looking toward the conversion of the Virginia Military Institute into a college for vocational training. If this suggestion is acted upon favorably, the students who are studying liberal arts at the Virginia Military Institute can be accommodated at the University of Virginia, with the addition of dormitory facilities, and those who are pursuing courses in engineering can be accommodated at the Virginia Polytechnic Institute without overcrowding.

Should the State Discourage the Attendance of Nonresident Students at the Several Higher Institutions of Virginia?

The survey staff have found (details are presented in Division IV and Appendix I) that a large proportion of the students at the University of Virginia, the Virginia Military Institute, and the Virginia Polytechnic Institute is enrolled from outside of Virginia. The staff have heard citizens say that the State should not be taxed to provide educational facilities for students from other States. The staff believe that it would be a disastrous policy for the State to adopt a regulation prohibiting the attendance at the higher institutions of students from outside the State. In all the States that have been advancing satisfactorily in a social and material way, impassable barriers are not set up in the higher institutions against non-resident students. It is true that in some of the States a higher tuition fee is charged nonresident students and this policy can be commended for Virginia, provided that the fee is not made so high as to be prohibitive. Virginia will be benefited educationally and probably materially by an influx of students from sister States; and Virginia should not overlook the fact that many of her sons and daughters migrate to higher institutions in other States. Virginia students are welcomed wherever they go, and a policy of educational reciprocity should be followed by Virginia. This does not mean that the State should not charge out-of-State students the actual cost of their instruction in any higher institution, but it should not go beyond this and erect an educational wall to shut out nonresident students.

Methods of Securing Increased Revenue for Higher Education

As indicated elsewhere in this chapter, the survey staff have learned from citizens of Virginia that there is opposition to the policy of providing higher education at public expense for all the young people of the State who wish to pursue a collegiate course. The staff believe that, since there are apparently many people in the State who are opposed to free higher education, the State should consider a plan of restricting free collegiate education to a limited number of students who possess superior intellectual and personal qualities. The State should determine through a properly constituted committee how many young men and women it is willing to educate at public expense every year at each of the higher institutions. Candidates for free tuition at these institutions should be selected according to a plan devised and supervised by the schools or departments of education in the University of Virginia and the College of William and Mary in co-operation with the State Superintendent of Public Instruction. There should be no discrimination as to sex in the selection of students, except that women should not be admitted to the college of liberal arts at the University of Virginia and only to the courses in home economics and business administration at the Virginia Polytechnic Institute. All candidates should be selected from the cities and from rural sections in proportion to rural versus urban school population. The basis for selection should be intellectual superiority in respect to the types of ability needed for successful completion of college work, and also character and physical vigor. The record made by candidates in the elementary and secondary schools should be weighed in connection with data secured from tests and physical examinations. The intention of this method of selection is to secure a group of superior men and women to be educated at public expense.

All students attending any higher institution, except students with State scholarships, should be required to pay the actual cost of their education, and the cost should be computed on the basis of the cost of maintaining the higher institutions on a par with higher institutions in other States, as outlined in Divisions IV and IX of this report. Students from outside Virginia should pay the same rate of tuition as nonState scholarship students within the State. Following this plan, the State would assume the expense of educating only a limited number of students, and those would possess superior intellectual and personal qualities. The increased revenue from tuition fees paid by nonState scholarship students would aid in elevating the higher institutions up to the level of higher institutions in States with which Virginia desires to keep abreast in material and social progress, due allowance being made for possible lower cost of living in Virginia and the attraction of climatic, scenic, and social advantages in the State.

Virginia Has the Foundation for Efficient and Adequate Medical Education, but the Medical Institutions Must be Adequately Supported

The Medical College of Virginia enjoys a widespread reputation for high-grade, efficient medical instruction. The same is true of the Department of Medicine of the University of Virginia. The latter has recently received a generous endowment which will enable it to meet the requirements of a modern medical education efficiently, if the State will provide adequate resources for the employment of competent medical instructors and also for laboratory facilities for demonstrational and research purposes.

The Medical College of Virginia, like the University of Virginia, has secured most of its physical plant by private gift. Virginia seems hardly to appreciate that it has acquired, in the case of the Medical College of Virginia, as in the case of the University of Virginia and the College of William and Mary, very valuable property with very slight investment. In view of this fact, it is reasonable to ask that the State maintain the Medical Colleges in Richmond and in Charlottesville on a par with modern medical institutions in other States.

The survey staff have had it repeatedly said to them that there is needless duplication in medical education, since either the Medical College at Richmond or the one at Charlottesville could meet the requirements of Virginia for medical education. But the State has acquired these physical plants with only a negligible outlay on its own part, which should lead the State to be lenient in its support of these institutions, even if there is some duplication. The survey staff is not convinced that there is any harmful or wasteful duplication in strictly medical work. Elsewhere in this chapter the staff have recommended that teaching of the basal or preliminary sciences in the College of William and Mary, the University of Virginia, and the Virginia Polytechnic Institute should not be duplicated in the Medical College of Virginia. These sciences can be adequately taught in the other higher institutions; but this is the only respect in which it appears that there could be economy by eliminating work which is undertaken at either the Medical College at Richmond or the one at Charlottesville. In this connection, it should be pointed out that Virginia is not overstocked with physicians. The standard for the United States as a whole is one physician to 704 of the population. In Virginia the ratio at present is one physician to 962 of the population. In the United States as a whole there is one dentist to 882 of the population, but in Virginia there is only one dentist to 3,615 of the population. In the States adjoining Virginia there is a larger ratio of physicians and dentists in relation to the population than is true in Virginia, even though the ratio in the South is below what it is in the United States as a whole.

Because of the excellence of its medical education, Virginia has heretofore furnished physicians for other States. As suggested elsewhere in this report, Virginia must decide whether it will contribute to the education of those of its sons and daughters who may find occupation in other States; if she decides against the policy of giving all qualified and eager young men and women an opportunity to secure an education without binding them to remain within the State after graduation, then she will not question the wisdom of continuing the practice of providing a medical education for qualified students regardless of where they may go after graduation. It should be borne in mind by Virginia that other States train men

and women for the medical as well as for other professions, who come into Virginia and give the State the benefit of the training they have received beyond its boundaries.

The vital need now so far as medical education is concerned is to make it possible for the Medical College at Richmond and the one at Charlottesville to engage full-time capable instructors for classroom and laboratory work and also competent men for research in the fields of medicine that are of particular importance in Virginia. The medical colleges cannot maintain their present position unless they can compete with medical colleges in other States for capable staffs of teachers and of research workers. If Virginia will not make it possible for the medical colleges to hold their own in a competitive world, then they must become mediocre institutions. The same situation precisely is found in the medical colleges as has been described elsewhere in this chapter in respect to the University of Virginia and the College of William and Mary.

Sectional Independence and Rivalry Have Been Unduly Strong in Virginia

The problem of securing State unity in Virginia is more difficult than it is in many States because of marked differences topographically between the different sections of the State. The mountainous sections are set off from the valley and tidewater sections. The occupations of the people and habits of life in the different sections vary widely, and this has tended to prevent a high degree of State unity. In many States of the Union there are no marked differences in the life and habits of the people in the various localities; and common interests, occupations, and industries are favorable to the development of State unity and cooperation. But the situation is quite different in Virginia, and the detachment of one section from another has been accentuated and perpetuated because of the lack of easy means of communication among the people in the different sections. Virginia has not gone forward as rapidly as many of the States in the development of a system of good roads between one section of the State and another. However, the survey staff have learned that from now on the State will engage in road building with a view to providing for the entire State ready means of transportation so that the people of one section will not be isolated from those in another section.

It should be remarked that railroad facilities of a certain type in a State are not adequate to encourage intercourse among the people in the different sections of the State. In the case of Virginia, the railroads in the State are, for the most part, trunk systems connecting northern points with points south of Virginia. The survey staff have been told that a large part of the traffic on the main railways is through traffic from Boston, New York, Baltimore, Philadelphia, Washington, and other communities in northern States to points in the Carolinas, Florida, and the Gulf Coast, and also from Chicago, Cincinnati, and other western communities to points on the Atlantic seaboard. It may be confidently stated that railways for through traffic do not adequately serve the purpose of highways for communication among the people in the different sections of a State like Virginia. Good roads are necessary for intercourse between the people in the different communities, and such intercourse is essential for cooperation among the citizens of a State. If the building of good roads will progress as it has been planned for Virginia, it is within reason to predict that State consciousness and solidarity among the people will become more marked than it has been heretofore or than it is at present, and this will reduce sectional aloofness and competition.

Institutional Independence and Rivalry Have Been Accentuated in Virginia

The survey staff have found that institutional individualism, consciousness, and rivalry are marked in the State. Each institution has developed largely without regard to the others or to the requirements of the State as a whole. Each higher institution is, in a way, struggling for life and increase of power and influence in competition with all the other higher institutions. The survey staff have mentioned this characteristic of the Virginia institutions to members of the various faculties, and it has been quite readily granted that there has been too great institutional loyalty and ambition as contrasted with State loyalty and the wish to play a role essential for the advancement and welfare of the State as a whole.

This lack of coordination among higher institutions has been due in part to the isolation of the institutions, each developing in its own locality without much reference to what was being done in the other institutions. It is due in part also to the fact that certain of these higher institutions were founded and maintained privately for a considerable period in their history. As private institutions they received endowments, and at the present time a large part of the support of some of these institutions is derived from benefactions from friends of the institutions. Even down to the present moment, the College of William and Mary, as an instance, is receiving endowment from private sources for the erection of necessary buildings; so that in reality, so far as support is concerned, the College of William and Mary is largely a private institution. Quite naturally, institutions maintained largely from private funds tend to develop along the lines of individual taste and ambition, without regard to State needs, guidance, and control. But Virginia has reached a stage now in its development as a State when cooperation among the higher institutions should be insisted upon; and the survey staff recommend the appointment of a Chancellor of Higher Education, having duties and powers as outlined in Division IV of this report.

The Teaching Staff in Virginia Schools Possess Superior Personal Qualities but Are Deficient in a Knowledge of Modern Educational Methods

Data are presented in several divisions of this report, especially in Divisions I, II, and III, showing that the spirit of Virginia teachers and their culture and personal qualities are admirable and worthy of praise. At the same time, taking them as a whole but allowing for notable exceptions, they reveal a lack of adequate training in modern educational principles and methods. The Virginia teaching profession still retains in too large a measure the theories and practices that were current throughout the entire country in an earlier day. In many schools that were visited by the survey staff, teachers were found who believe that teaching consists in requiring pupils to memorize the contents of books, and testing them to see whether they have memorized accurately and have retained what they have learned. This method of teaching is being or has already been completely abandoned in the States that are going forward educationally. For the mere memoriter and recitation type of teaching there is being or has already been substituted the *problem* or *project* method, which is better adapted to develop originality, resourcefulness, initiative, and independence in pupils.

It is especially important that Virginia should adopt methods of teaching in all public schools (and in every higher institution also, it may be said in passing) which will develop in pupils initiative, resourcefulness, and a dynamic attitude toward problems in every-day life. The survey staff believe that while teaching in Virginia has operated to develop refinement and gentleness in the young, it has not at the same time developed the necessary initiative and aggressiveness in the people so that the State may maintain its position among States where initiative, resourcefulness, and dynamic ability are being cultivated in high degree in the schools. The survey staff believe that it will be possible for Virginia to continue to retain the estimable qualities of gentleness, refinement, unselfishness, and a cultivated demeanor, which are markedly characteristic of the Virginia people, and at the same time to develop resourcefulness and a dynamic attitude toward the material and social problems of daily life.

To repeat,—the teachers, in common with the laymen, of Virginia manifest a good spirit, and the survey staff do not think it advisable or necessary to introduce any system of teacher training which will lessen their estimable personal qualities; but it is believed that the teachers can by proper training in teachers colleges and all other teacher-training institutions be made to realize that Virginia's greatest need now is the development of a self-reliant, investigative, and dynamic attitude on the part of the people, and that a type of education which encourages or permits pupils merely to learn in a static way and not to become aggressive in attacking real problems will not enable Virginia to regain and to hold its position of prestige among the States of the Union. From observations made by the survey staff and described in several divisions of this report, it is apparent that Virginia is just entering an era when dynamic teaching will replace memoriter, static teaching. The staff believe that the leaders in teacher training at the University

of Virginia, the College of William and Mary, and the four teachers' colleges have a modern point of view, in the sense that they are in accord with the plan which has been so generally adopted in all progressive States to train the young in the schools to be original, resourceful, dynamic; and with facilities and encouragement from the State, they will work devotedly to make the teachers of Virginia in the future follow a type of instructional procedure which will lead pupils to become interested and aggressive in dealing with *real problems* that are typical of those that will be encountered in daily life in Virginia outside of the schoolroom.

The Teachers in Every Department of the Public Educational System of Virginia Are Underpaid when Judged by Standards for the Country as a Whole

Detailed data presented in Divisions I, II, III, and IX of this report will show that the median salary of teachers in the rural schools, and in elementary and secondary schools in the cities (and in the teachers' colleges and higher institutions as well) are markedly lower than median salaries of teachers throughout the country taken as a whole. It is shown in Division IX that when proper weighting is applied to Virginia salaries so that they may be compared with salaries in other States on the basis of relative wealth and income in the States, with allowances made for differences in the cost of living, Virginia is still underpaying its teachers in all departments of the educational system. So long as this practice is continued it will not be possible for teachers to make adequate preparation for teaching up to modern standards. This is undoubtedly the chief reason why so large a proportion of the teachers in Virginia has failed to attain reasonable standards in academic and professional preparation.

Virginia Has Underestimated the Dignity and Importance of Rural and Elementary School Teaching

Adequate evidence is presented in Divisions I, II, V, and IX of this report to warrant the statement that the people of Virginia, taken as a whole, have heretofore not attached great importance to teaching in rural schools and elementary city schools. A considerable proportion of teachers in rural and elementary city schools has had very meager training or no training at all for their work. This is particularly true of rural teachers. It should be emphasized that the rewards, both tangible and otherwise, have not been sufficiently adequate or alluring to induce teachers to make proper preparation for teaching in the lower schools, whether in rural sections or in cities. The survey staff have observed that those who have aspired to the teaching profession have been more eager to prepare for the upper grammar grades and high schools in cities than for the primary grades or for the rural schools. The staff have learned that there is a serious shortage of competent teachers for rural and elementary city schools, especially the former. There is sufficient evidence to warrant the statement that the stronger and more capable teachers avoid positions in rural and elementary city schools.

The relatively slight importance that has been attached to teaching in rural and elementary city schools has been reflected in recent developments in what are now the teachers' colleges, but which were formerly normal schools. These teacher-training institutions were established for the purpose of preparing teachers for rural and for elementary city schools; but when it was impressed upon them very deeply that there was but slight prestige attached to teaching in rural and elementary city schools, the normal schools quite naturally became discontented with their status among the educational institutions of the State. The normal schools were generally regarded as occupying an inferior position in the educational system. They did not enjoy the professional or social status which was accorded readily to the higher institutions. The University of Virginia, the College of William and Mary, the Virginia Military Institute, and the Virginia Polytechnic Institute did not lose caste when they engaged in the training of teachers for secondary schools. The people of Virginia have held and still hold more or less naively that teaching in the high schools requires a higher order of talent and personal qualities as well as more extensive academic training than are essential for

teaching in a rural or elementary city school. Further, teachers have secured in secondary schools not only a higher social position but they have also obtained larger rewards for their services.

This attitude toward rural and elementary teachers was extended to the normal schools, so that they did not obtain the esteem of the people of Virginia. The higher institutions looked down upon them, and the members of the faculties received lower salaries than members of the faculties of higher institutions, while their duties were harder and more exacting. This situation created discontent in the normal schools; and in order to gain recognition in the State, and to be admitted to the social position occupied by other higher educational institutions, they quite naturally aspired to become colleges and to engage in training teachers for secondary schools. The educational survey in Virginia in 1919 recommended that the normal schools should not become teachers' colleges but should continue to train rural and elementary teachers exclusively; but the professional and social position occupied by the normal schools was so intolerable that, in spite of the recommendation of 1919, the normal schools have taken on enlarged functions.

The people of the State are responsible for the situation which exists today in respect to the intellectual capability and professional equipment of teachers in rural and elementary city schools. This situation cannot be remedied except by public recognition of the importance of teaching in these lower schools. In most of the States of the Union, elementary city teachers now enjoy a professional and economic status on a par with teachers in other departments of the public educational system. The belief is universal among those who have been studying educational work in America that teaching in a rural school or in an elementary city school requires just as high native ability and just as fine preparation, to say the least, as teaching in high school or in college; and no one will deny that it is as vital for the well-being of a rural State like Virginia and of the children individually in the schools that as expert teaching should be done in rural and elementary city schools as in any of the higher schools. Not until the people of Virginia put teachers in rural and elementary city schools on a par economically and socially with teachers in secondary schools will it be possible to entice capable teachers into the rural schools and the elementary city schools. Not until this change is brought about will the teacher-training institutions apply themselves wholeheartedly to the preparation of teachers for the rural and elementary city schools.

One aspect of the situation which should be mentioned in passing further illustrates the effect of underestimating the dignity and importance of, and the technical requirements for, efficient teaching in rural and elementary city schools. It is shown in this report, in Divisions I, II, and VII, that most of those engaged in supervising elementary city schools and rural schools have not had experience in or training for elementary teaching. They have made preparation for a business career or for teaching in secondary schools; and when they have been promoted to the position of superintendent or principal, they have not hesitated to undertake the responsibilities of such a position, assuming that teaching in elementary grades is so simple a matter that no special experience or training therefor is necessary in the supervisor or principal. This is one important factor which is a barrier to the improvement of teaching in rural and elementary schools in Virginia. Commonwealths in which satisfactory educational progress is being made are requiring that those who superintend or supervise elementary education shall have proper training therefor, in accordance with the principle that elementary teaching demands as high a degree of pedagogical understanding and skill as teaching in any other department of the educational system.

The Teachers Colleges Are Serving the State Exceptionally Well, All Things Considered

Since reference has been made to the discontent of the normal schools with the professional status ascribed to them by other educational institutions and the people of the State, it should be said here that the devotion of the faculties of these teachers colleges to the interests of the State is most commendable. The resources of these colleges are greatly restricted; the salary scale in all of them as compared with salaries of teacher-training institutions in most States outside of Virginia are

very low; the teaching schedule for all members of the faculties is comparatively very heavy. The personnel of the faculties is, speaking generally, commendably high. Detailed concrete evidence is presented in Division V, showing that the work which is being done by the members of these faculties in most of the institutions is meritorious. Virginia is receiving from these colleges service beyond what might be expected from the support which the State gives to them.

There is evidence that the women who graduate from the four-year courses in the teachers colleges make excellent high-school teachers—certainly better than either the two-year group who are so numerous still in the high schools or the present large number of graduates of liberal arts colleges from within and without the State who are wholly without professional preparation as the result of the “collegiate certificate” arrangement. There is obviously considerable variation among the teachers colleges of Virginia, but an impartial observer, used to seeing higher institutions of all kinds throughout the United States, cannot fail to be favorably impressed with these institutions at their present stage of development. The best of these teachers colleges are better than the average college, and the poorest of them is better than many private and denominational colleges in Virginia and elsewhere.

There is no evidence that the teachers colleges, taken as a whole, are neglecting the work of preparing elementary teachers. On the contrary, they all seem to be urging prospective elementary teachers to remain the full four years, despite lack of any economic incentive so far as better State certification is concerned. More and more it is coming to be recognized that no hard and fast line (certainly so far as amount of preparation is involved) can be drawn between preparing high-school teachers and elementary school teachers. The present tendency everywhere, and one that is recognized as encouraging, is to require a four-years’ preparation for elementary as well as high-school teachers. While certain types of specialization are of course desirable, and may well be represented in varying degree in the different institutions, the real task of the teachers colleges is to prepare teachers for all levels of the public school situation. The fact that training-school facilities are available for high school as well as for elementary school work makes it possible to confine elementary and secondary teacher training. The subject matter emphasis in the case of the high-school teacher preparation is helpful for the general culture of the elementary teacher; and the emphasis upon understanding children which is characteristic of modern elementary teacher preparation is greatly needed by those who are planning to teach in high school.

All the teachers colleges report that their graduates are placed, though it is true that some of them have gone to other States, particularly North Carolina, because Virginia salaries are so low. The total number of four-year graduates last June from the teachers’ colleges was around 200, and not all of these were candidates for positions in high schools. For the year ended June, 1926, only 424 teachers out of 2,344 in the accredited high schools of Virginia had the “collegiate professional” certificate, which is the recognized standard certificate for high-school teaching at the present time. More than a third (810) had only the “collegiate” and still more (865) had the very low “special” certificate by which Virginia still allows persons with only two years’ of college work to teach in high school. Several hundred others had even less preparation for their work than any of these.

Is There a Surplus of High-School Teachers in Virginia?

What actual surplus there is of high-school applicants is traceable to two causes: (1) admission to high-school teaching of candidates with only two years of college work; (2) admission to high-school teaching of graduates of liberal arts colleges without the professional education now regarded as necessary.

The first of these sources of unqualified teachers the State Board has recently taken steps to eliminate by requiring full college graduation for new entrants by 1929. As shown by the figures given above, however, there are still an abnormally large number of such teachers in Virginia high schools—about forty per cent of the total.

The second source of unqualified teachers should be taken care of with equal promptness. The day has passed when graduation from a liberal arts college with-

out professional training should admit a person to the teaching profession. Other States have long recognized this, and one very real reason for the influx of out-of-State graduates into Virginia is that these graduates of old-line colleges without professional education courses cannot get positions in the high schools of their own States. It is highly desirable that the high schools of Virginia should have on their teaching staffs graduates of the finest liberal arts colleges of Virginia and other States; but it is equally desirable that Virginia's high schools should have teachers as well prepared professionally as graduates of the State's own teacher-training institutions, or colleges and universities outside the State maintaining adequate teacher-training facilities. The State Board of Education should abolish the "collegiate certificate" and require of all high-school teachers the equivalent of the present "collegiate professional" certificate. The State should also see to it that in adding the necessary education department in liberal arts colleges, no mere "philosophy of education" and "history of education" courses shall suffice. Liberal arts colleges everywhere in the United States have found it not at all inconsistent with their function to give education courses that center about actual teaching as the laboratory for demonstrating the processes of education and preparing students for teaching.

The State should, by a certification plan based upon better pay for better qualified teachers, encourage the four-year preparation for elementary and high-school teachers alike. Even now the leading school superintendents have learned to prefer four-year graduates, but the State can speed this process by some such device as is used in Pennsylvania. The Pennsylvania plan, which was adopted after very careful study by experts in teacher training, provides for financial aid from the State for part payment of teachers' salaries, the amount depending upon the quality of the preparation of the teacher. For example, for a teacher equipped with training corresponding to the Virginia "college professional" certificate—college graduation or work including the required education courses—a small community in Pennsylvania would receive \$650 from the State—a less amount for less preparation. The result is that school boards find it costs them no more to employ a fully-qualified teacher, whether for high school or for grades, because, while they are required to pay more for the better teacher, they draw more than they otherwise would from the State.

It may not have been wise to make all the Virginia teacher-training institutions "teachers' colleges" at one move, but this political accident—if such it was—happens to be peculiarly fortunate for a future program of teacher training. The whole tendency at present is towards the four-year requirement for teacher training, in the case of elementary teachers as well as high-school teachers. What is now needed is some State aid, preferably of small financial type, that will make it worth while for students in the teachers colleges to stay four years even for elementary teaching and will make it also worth while for school boards to take the four-year applicants rather than the "cheapest" teacher who applies. Definite encouragement by the State of the four-year program would have the further desirable effect of allowing the teachers' colleges to enrich their programs in the first two years. At present, knowing that large numbers will leave at the end of the second year, the institutions feel obliged to give all possible specific preparation for ordinary classroom teaching, even though they understand the necessity for more all-round education in the first two years for future teachers. Virginia's group of teachers colleges seem to afford an unusual opportunity for putting the State in the lead, instead of behind, in the preparation of elementary as well as high-school teachers.

Teacher Turnover in Virginia is Very Rapid

Since nearly 90 per cent of teachers are women it is natural to expect that their teaching experience will be brief. Marriage is the destiny of most women, but it is no loss to society when a capable teacher becomes a home-maker. Nevertheless, the fact that the teacher turnover is very great in Virginia (in many counties at least one-third of the rural school teachers are teaching their first year and throughout the entire State the length of

service of a teacher is much less than ten years), it becomes important that teachers should be well trained before they enter the profession. For economic reasons it has seemed necessary to permit teachers to enter the profession with only one year of training beyond high school. Such teachers are young, inexperienced, and have inadequate professional preparation. The elementary certificate issued to these graduates is good for six years, consequently it is practically a life certificate. In other words, the State is inviting these candidates to drop out of school at the end of one year of college work and it does not encourage them to continue their preparation after taking up teaching.

Those who have done two years of college work have received a certificate which with its renewal is valid for twenty years. Very few teachers are in service beyond that period. Here again the State is inviting teachers to abbreviate professional preparation.

Should Virginia Encourage the Development of Junior Colleges?

It has been brought to the attention of the survey staff that there are plans under consideration in a number of communities in the State to add a two-year junior college course to the present four-year senior high school course. The staff have been told that the people in some sections of Virginia wish to keep abreast of the movement which has been initiated in some States for the development of a junior college system. The staff believe that the time has not yet arrived when the establishment of junior colleges should be fostered by the State. It would not be sound policy to appropriate funds for the maintenance of junior colleges when rural, elementary, secondary, and higher education is below standard, as it is today in Virginia. It would be an educational blunder for Virginia to undertake new educational developments while the children of compulsory school age in rural and city schools are growing up in illiteracy because facilities for their education cannot be provided. A junior-college system should not be fostered by the State until teachers in the schools and higher institutions can be paid salaries commensurate with the salaries paid to teachers in other States. The State cannot afford to contribute to the development of junior colleges until vocational guidance has been established in secondary schools and opportunities for vocational education have been provided for graduates of junior and senior high schools.

In due time, if Virginia makes rapid progress in the improvement of education in elementary and secondary schools and higher institutions and in the establishment of a system of vocational education and guidance, she should then encourage the development of junior colleges, provided that those who desire an education in liberal arts beyond the high school cannot be admitted to the liberal arts courses at the University of Virginia and the College of William and Mary, and also at the college for women, if the State shall establish such a college as is recommended in this report. It has come to the attention of the survey staff that some persons are interested in a two-year junior college course to be added to the present four-year senior high-school course. The staff believe that this plan is not to be recommended for Virginia. When a boy or girl has completed eleven or twelve years of schooling in his home town, he should leave his home if he continues his education. He will be benefited by coming in contact with different classmates and different teachers. Young men and women in Virginia need to be placed upon their own resources earlier than they now are. There is a possibility that they are being mothered for too long a period. It will be an advantage for them when they complete a high-school course to be placed in institutions where they must rely upon themselves to solve their problems and to make adjustments to the people with whom they live. The detachment of boys and girls from their homes can be delayed too long; most of them would develop greater strength, originality, self-reliance, and efficiency if they should leave home by the age of eighteen at the latest. This requires

that when the time arrives for the State to foster junior colleges, it should not pursue the policy of extending high-school courses, but it should establish these colleges independently of high schools.

The people of Virginia should be reminded of the fact that there are many private colleges in the State that are in effect junior colleges. The survey staff have made inquiry regarding the expenses incurred by a student attending these private institutions, and so far as data have been secured, it appears that the expenses at most, if not all, of these small private colleges are quite low. The State should take this situation into account before establishing a State system of junior colleges. For the time being, at least until the present system is improved in the various respects outlined in this report, any girl or boy who wishes to complete a junior-college course can find opportunities therefor in the private colleges of the State.

Virginia is Making Commendable Progress in the Education of the Negro

The survey staff have been able to compare facilities for negro education in Virginia today with the facilities provided a decade ago. It is evident that improvement has been made and is now in progress in respect to every phase of negro education. Virginia has gone forward in this work more rapidly than some neighboring States in which the problem is much the same as it is in Virginia. The survey staff have no doubt that negro education constitutes a very real and serious problem for Virginia, as it does for most, if not all, of the other Southern States. However, Virginia should find consolation and encouragement in the fact that the foreign population in the State is not nearly so great as it is in many States of the Union. The problems of educating a large foreign population, adults as well as children, are somewhat the same as the problems in Virginia of providing suitable education for the negro population.

There is Need for Improvement in Facilities for Negro Education

While Virginia is making encouraging progress in negro education, it is imperative that improvement should be continued and should be accelerated. A considerable proportion of negro children of compulsory school age is without any facilities for an education and is growing up in illiteracy. Many of the negro schoolhouses and environs are extremely unsanitary, unsightly, and ill-adapted to the efficient training of negro children. There are many children who are not in school at all, either because they are too remote from a schoolhouse or because the compulsory school law is not enforced with them. This is regarded as a serious defect in the education of the negro in Virginia. The survey staff have sought counsel from men of experience who have studied the problem of negro education deeply and from every angle, and they are all agreed that an illiterate negro population retards the development of a State and is a menace to the peace and prosperity of the white as well as the negro population.

The survey staff wish to express their appreciation of and admiration for the educational work which is being done for the negro by philanthropic individuals and organizations, notably by the Jeannes and Rosenwald Foundations. School buildings and equipment adapted to the needs of the negro population have been and are still being provided from these funds. Supervision is being carried on by capable persons financed by these foundations. The programs of work in the schools fostered by one or another of these organizations is well adapted to the needs of the negro population.

Courses of Study and Methods of Instruction in Public Schools for Negroes Can and Should Be Revised

The programs of work in State-supported schools for the negro population can be improved. Much the same type of elementary education is

provided for the negro as for the white population. There is very little education of secondary or collegiate grade provided for negroes. The survey staff believe that the best interests of the negro population and of the State are not promoted by imposing upon negroes the same type of education that is provided for the white population. The negro population must continue to be engaged principally in agricultural pursuits, but efficient agricultural education is not provided by the State. The program of studies in public elementary schools is not based fully enough upon the chief needs of the negro population outside of school. The work is largely verbal, symbolic, and formal, with little or no opportunity for manual or vocational training of any sort. Negro children need particularly to acquire an understanding of and confidence in nature, so that their mental life will become attuned to the natural phenomena occurring about them. They should have a knowledge of personal, home, and community hygiene, and they need to acquire elementary health habits. They should gain an understanding of their civic relations and they should be imbued with elementary ideas pertaining to community and State well-being. They need to know how to read readily, to write English sentences pertaining to simple relationships in daily life; but they will not be in need of a knowledge of formal grammar. They need above everything else to be trained to think in accordance with natural law and not caprice. Negro pupils are not receiving enough of this type of education in the public elementary schools.

Provision should be Made for Higher Education for Negro Leadership

It is highly important for the welfare of the State and of the negro population that the more capable members of the negro race should have opportunity to secure an efficient secondary and collegiate education so that they may prepare for the professions and become leaders of their people. Investigations conducted outside of Virginia show that there are gifted individuals among negroes and that they can take advantage of all the educational opportunities that are offered them. Students of the problem of adjustment of the white and negro races in southern States are agreed that negro leadership should be developed in the negro race, but this is impossible when there is not adequate provision for the training of negro leaders. Fortunately for Virginia, there is an institution within its borders that is well qualified to train negro leaders, and there is developing a system of high schools and particularly county training schools that afford gifted negro youth an opportunity to complete a secondary education in preparation for higher education leading into the various professions. Virginia should contribute up to the limit of its resources to the promotion of secondary and higher education for negro youth capable of profiting by it, with a view to serving their people in the State in positions of leadership.

Teachers in Negro Schools Are for the Most Part Untrained for Their Work

The survey staff have found schools taught by teachers who are utterly untrained in either an academic or a professional way. It is impossible for such teachers to do acceptable work. It might be better for negro children not to be in school at all than to be taught by a teacher who is herself almost illiterate.

The salaries paid to negro teachers in public elementary schools is wholly inadequate to secure teachers who have had the requisite amount of academic and professional education. The State should enter immediately upon a program of increasing salaries for negro teachers, who should be required to attain a reasonable standard in academic and professional preparation. In due time, the same standards should be required of a negro teacher as of a white teacher who teaches in a school for whites. The survey staff do not advise that precisely the same course of study be followed in negro as in white schools, but only that teachers be equally competent in both types of schools.

Virginia Has a Highly Centralized Administrative System

The survey staff have been impressed with the thorough organization and the efficiency of the State Department of Education. The department is organized in various divisions as described in Division VII of this report. Each division has charge of a department of public educational work. The State department exercises dominating control over the public elementary and secondary schools of the State, and plays an important role in the control of the higher institutions, including the teachers colleges.

The survey staff have found that the State department is in intimate touch with the public schools in every locality of the State; one may find in the department accurate and well organized data pertaining to the work of all the public schools of the State. Educational authority in the State issues largely from the State department. Courses of study, methods of instruction, school building, etc., are determined by specialists in the office of the State department. This centralized policy has undoubtedly been necessary heretofore in order to secure a high degree of conformity with educational standards in the public schools of the State. The present administration found the schools in the various sections of Virginia operating without guidance or control from any source, and there was great variation in the quality of the work that was being done in different communities. In order to improve this chaotic condition it was deemed advisable to impose standards upon the schools of the State and to adopt measures which would insure observance of rules and regulations. This need has determined the policies of the State department.

The time has arrived when it is desirable for the different communities in Virginia to take the initiative to a considerable extent in discussing and determining educational objectives, materials, and methods of instruction. The people have reached a stage in educational development when they are prepared to play an independent part in deciding upon the type of educational work best suited to their respective communities, and they will be stimulated and benefited by being made responsible for the discussion of the purposes of education and ways and means of accomplishing the ends for which the schools are maintained.

The People of the State do not Have a Direct Voice in Their Educational Affairs

The State Board of Education is not accountable to the people of the State because members of the board are not appointed by the Governor or are not elected by qualified voters of the State. The ex-officio membership of the Governor and Attorney General on the board is wholly incidental. The State superintendent is elected by the people and he is responsible to the State Board of Education, of which he is president, but the board is not subject to the will of the people.

The educational institutions of the State nominate representatives for membership on the board. The institutions so represented are dependent upon the General Assembly for maintenance. The Senate nominates a list of persons, from which list the institutions select their nominees. In this way the Senate becomes a dominating factor in determining the budget of public educational institutions.

The State Board of Education in Virginia is not Free from Political Influence

The State board is likely to represent the dominant political party of the State. Rivalry among educational institutions may also play a role in affecting membership on the board. The State board should represent the people only and should therefore be a lay board rather than a professional board. It is a sound administrative principle that one whose official position is determined by a board should not be a member of that board.

The State Superintendent is an elected officer. It is becoming increasingly evident that popular election is not the best method for securing expert service in education or in any other way. Formerly the State Superintendent of Public Instruction in most Commonwealths was a clerical and statistical officer; he was not chosen because of his expert leadership in education; but in most Commonwealths the State superintendent is now chosen because of his knowledge of education and his ability to lead the State in its educational programs. For this reason the State

superintendency should be wholly removed from politics and it should be possible to choose a State superintendent from outside the State. The State superintendent should not be a member of the State Board of Education, since he is the executive officer of the board.

The Primary Functions of the State Superintendent's Staff of Specialists Have Been Inspection and Supervision

With as many public schools as are found in Virginia, it is not feasible to provide a sufficiently large staff of experts in the State Department of Education properly to supervise and inspect all the public schools of the State. In order to do this effectively, it would be necessary greatly to increase the inspectorial and supervisory staff in the State superintendent's office. In the building division of the State department there is a staff of five specialists who prepare plans of school buildings outside of cities and supervise their construction. It is even more important that other divisions in the State superintendent's office should be more largely staffed than the building division if all the public schools are to be inspected and supervised. The leadership of the State department should be exerted in other directions more largely than in inspection and supervision.

County and City School Boards do not Represent the People in the Respective Units over which they have Jurisdiction

Under the present plan in Virginia, the voters of a county have no voice in the administration of their school systems. The county board which has charge of the schools is appointed by the school trustee electoral board, and the people do not elect the latter board. The basis of selection of the county board is the magisterial district rather than the county at large. With such an arrangement there is danger that members of a board will be interested principally in the advancement of their respective districts rather than the county at large.

City school boards represent districts within their respective cities rather than the cities at large. The municipal council in each city appoints to the city school board three trustees from each school district. With this arrangement, the people have no direct voice in the selection of those who administer the public schools.

The county school budget is controlled by the county board of supervisors. This board is not primarily interested in education, and it is not qualified to determine wisely the funds needed for the maintenance of the public schools of the county. There is great variation in rates of school taxation among the counties of the State, and also great variation in school facilities and educational opportunities among the counties. The municipal council in the cities is the tax levying body and may reduce the local school budget as it sees fit.

The Duties of the Division Superintendent of Schools in Virginia Are Fiscal, Statistical, and Inspectorial

The division superintendent in Virginia does not give his attention specifically to the improvement of teaching, though he is required by law to inspect schools in order to see that teachers discharge their duties faithfully, and he must also provide and preside over institutes to promote improvement of teachers. A study of the activities of division superintendents in Virginia, details of which are presented in Division VII of this report, shows that 20 per cent of the superintendent's time is given to office management and routine, 12 per cent to looking after school plants, 13 per cent to selecting the teaching staff, and only 6 per cent to supervision of teachers and 3 per cent to teaching and testing. The data secured by the survey staff show that the division superintendent is not primarily an educational leader among the schools of which he has charge. He is so heavily burdened with clerical duties that he does not have adequate time or energy to devote to educational leadership.

The Compulsory Education Law is Not Well Enforced in Some Sections of Virginia

Reference has been made elsewhere in this chapter to the fact that there are children, both white and colored, in Virginia who are not having any educational advantages; they are growing up illiterate. A larger proportion of the people of Virginia is illiterate than is true in most of the States of the Union; the only States that have as high a percentage of white illiteracy are Louisiana, North Carolina, Tennessee, Kentucky, South Carolina, Alabama. The situation in respect to this matter is worthy of serious attention. The survey staff have visited counties in which school officers have admitted unhesitatingly that there were children of school age in their respective localities who were not enrolled in school and who have never been in school, because there has been no place to put them or because they were remote from a schoolhouse and there has been no way to transport them to school.

Virginia has a compulsory school law, which is analyzed and commented upon in Division VIII of this report. It is shown therein that the law is not very well adapted to secure enrollment and attendance of children of compulsory school age. It is not rigorously and, in some places, not even moderately well enforced. The survey staff believe that there is considerable indifference in some sections of Virginia in respect to the desirability of compelling all children in the State of compulsory school age to be enrolled in school and to attend with a high degree of regularity while they are enrolled.

The situation is much worse for the negro than for the white population. It is shown in Division VI of this report that an inordinately large proportion of negro children is not receiving any schooling, either because there are no facilities for them in the localities in which they live, or because they are too far away from schools and there are no provisions for transporting them, or because school authorities think that it makes little or no difference whether or not negro children grow up in illiteracy. There can be no doubt that the situation requires immediate attention from the responsible educational officers of the State. It is necessary to devise a compulsory education law and methods for its enforcement which will compel negro as well as white children to attend school each year while school is in session during the compulsory school age.

The Public Schools of Virginia Are in Need of More and Better Classrooms

While Virginia has been making progress since 1920 in the construction of school buildings, it still falls far short of providing enough of school-rooms for the children of school age in the State. Detailed data relating to this matter are presented in Chapter LXI, Division X. Since 1920 the State Department of Education has maintained a division of school buildings which has served the communities of the State free of cost in designing school buildings and in supervising their construction. This service has resulted in economy and efficiency in school buildings. The survey staff are appreciative of the value of this service, but they think that it would be possible to secure the same economy and efficiency in public school buildings if a school building code were established and if it were provided that the School Building Division of the State Department should approve all school buildings before they are erected. Further discussion of this matter is presented in Division VII and in Chapter LXI, Division X, of this report.

Virginia should provide public education for all pupils from six to fourteen years of age, inclusive. In order to accomplish this it is necessary to provide 11,860 classrooms for the county schools and 3,147 for the city schools. In addition to the standard classrooms now available, a total of 4,372 standard classrooms for the counties and 832 standard classrooms for the cities are needed for the pupils in grades one to seven in order to provide

adequate classroom facilities for the children of compulsory school age. For pupils in high schools, 227 standard classrooms in addition to those now available are needed for the pupils in the counties, and 171 standard classrooms for children in the cities in order that they may be provided with adequate classroom accommodations.

There is Great Variation Among the Various Sections of Virginia in Ability to Support Public Education

It is shown in great detail in Division IX that the resources of Virginia that can be utilized for educational purposes vary greatly in the different counties of the State. Some counties have from three to five times as much wealth as other counties behind every child of compulsory school age in the different counties. It is manifestly impossible for an impoverished county to support out of its own resources schools of as high grade with as good buildings, as adequate equipment, as well-organized teachers, as a comparatively wealthy county. The people of Virginia are not unaware of this variation in resources among the communities of the State, but they have thus far been governed largely, though not wholly, by the political and economic principle that each community must take care of its own children, providing as good educational facilities for them as it is able to do. The time has arrived for Virginia to adopt a different policy. The State can be no stronger than its weaker communities. Children growing up in comparative ignorance in one community will probably not remain continuously throughout life in this community. In Virginia, as in other States, the people are not as a rule rooted for life to one spot; they migrate from one community to another. The State as a whole will feel the effects of inadequate education in any section of the State. This fact has already been recognized in many of the States of the Union, and it should forthwith be recognized and acted upon in Virginia. Unless Virginia can regard education largely as a State function, and can make provision for the proper education of the children in impoverished as well as in well-to-do communities, it will lag behind sister States and it will be retarded in its progress by ignorance and by illiteracy. It might be urged further that the State owes it to every child to provide modern educational facilities for him, but this is not the basis upon which it is recommended by the survey staff that well-to-do sections should contribute to the education of children in less favored sections economically. This policy is advocated primarily because it is essential for the stability, unity, and prosperity of the State as a whole.

More Rapid Progress Should be Made in Virginia in Offering Home Economics in Elementary and High Schools

In Chapter LXVII, Division X, it is shown that in 1926-27 nearly 200 high schools offered work in home economics. Some of these schools receive State or Federal aid and are known as vocational schools. Schools which receive only local aid are known as nonvocational schools. In 1926-27 the total enrollment of pupils in home economics in the schools receiving State or Federal aid was less than 5,000; the survey staff has not been able to learn how many pupils in nonvocational schools are enrolled in home economics courses. No special work in home economics is offered in the elementary schools, including the seventh and eighth grades, which are sometimes classified as junior high schools.

The survey staff believe that it is of supreme importance for Virginia that the sciences and the arts that pertain to homemaking should be taught in all the rural, elementary, and secondary schools of the State. There is reason to believe that there lingers on in some sections of Virginia, possibly throughout the State, the view that homemaking does not require either knowledge or skill—that it is a matter of routine which can be delegated to wholly untrained persons. In most of the other States of the Union, the study of

homemaking in the light of modern sciences relating to sanitation, food values, the preparation of foods, etc., has made great progress during the past decade. In many communities every girl enrolled in the seventh or eighth grade of the elementary school or in the high school is required to complete courses in home economics. A recent survey completed by the United States Bureau of Education shows that this work is going forward with great momentum. The survey staff believe that Virginia is in as great need of enlightenment regarding the knowledge to be secured from home economics courses properly taught as is any State in the Union. The advancement of the State will depend in considerable measure upon the extent to which sciences pertaining to nutrition, health, etc., are applied to the practical problems of homemaking.

The survey staff conducted an investigation to determine to what extent the work in home economics courses in the high schools is carrying over into the homes of the communities in which girls are enrolled in these courses. An analysis of the data received from this inquiry shows that in some degree, at any rate, the knowledge gained in home economics is being made functional,—girls are applying in their homes what they are gaining in their home economics courses.

The principal of a school wrote as follows in response to the question, "Does the work in home economics in the school affect the home beneficially?":

"The carrying over into the homes of the knowledge and practice gained in the home economics department has materially improved the home conditions. In fact, we deem this one of the chief goods derived from the home economics work. The teachers encourage the trying out at home of receipts given in the foods department and also duplication of problems given in the sewing department. Many observations are made from year to year which show that this is being done to a great extent. From our mothers' clubs we get their reaction to this department, and without exception we find that they are delighted that the children have these privileges. Even our local grocerymen have commented on the change that has come over the quality and variety of foods called for as against what was asked for ten years ago. We can but feel that a part of this change for the better is directly traceable to the training the children are receiving in the home economics department.

"Another one of the good results is the attitude of the children toward home work. From looking upon it more or less as drudgery, many of them have come to look upon cooking and sewing as arts and take pride in being able to perform these arts well.

"A third function of this department is that it serves to widen the experience of the children and as a basis of correlation for English, hygiene, mathematics and other studies through the grades.

"A number of our children are forced by circumstances to look after younger brothers and sisters in their homes and actually to take the responsibility of much household work and we know that this is done more intelligently because of school training.

"Before deciding on our course of study, careful investigations were made as to the home needs of our particular people in order that our course might meet these needs as nearly as possible."

Virginia Has Entered Upon an Efficient Program of Physical Education and Health Promotion

There are presented in Chapters LXIII and LXIV, Division X, data showing that intelligent attention is being given in the schools and higher institutions of Virginia to problems that have to do with the physical development and the conservation and promotion of the health of pupils. The program upon which Virginia has entered can be highly recommended. It appears to the survey staff that the physical development and the health of pupils in the schools and of students in higher institutions should be somewhat better than

in many of the States of the Union because of the climatic advantages in most of the sections of Virginia. In Virginia, pupils can be out of doors for some time practically every day in the year, while in many of the States children must keep within doors nearly all the time for several months in the year. Virginia climate is favorably affected by the sea on one side and mountains on the other, which is advantageous for health, if a health program in respect to exercise, nutrition, and the like is followed. The survey staff have evidence to the effect that Virginia is beginning to carry forward an efficient physical education and health program in a vigorous and effective way, and it is recommended that the present program be continued and extended to all the schools of the State. It is not thought by the staff to be desirable that Virginia should seek at the present time to modify its physical education and health programs, but only to extend them. In due course, after these programs have been in effect for a period long enough to secure data regarding their efficiency, it is recommended that the State Department of Health, cooperating with the State Department of Education, should undertake a survey in order to obtain reliable facts concerning the physical development and the state of health of the pupils in the schools and of the students in the colleges in Virginia. The survey staff anticipate that results will be secured from such an investigation which will encourage the health and educational authorities in Virginia to continue the physical education and health programs which have recently been inaugurated.

The health program upon which Virginia is entering is applied only to pupils. It should be applied also to teachers. Every effort should be made to provide conditions under which teachers perform their duties so that they may preserve physical vigor and health. Every teacher should undergo a physical examination before she receives a teacher's certificate, and a certificate should be denied unless in physical vitality and in freedom from defects she reaches a standard to be established by the State health and educational authorities.

Vocational Agriculture in the High Schools should be Greatly Extended

It has been said previously in this chapter that Virginia is essentially a rural State. Agriculture is or should be the pursuit of a large proportion of the people. The welfare of the State depends at present and will continue to depend upon the efficiency with which agriculture is carried on.

It is far more important now than it was formerly that scientific methods of agriculture should be adopted in all parts of Virginia. Before the great agricultural States of the West were flooding the markets with agricultural products, it was not necessary that Virginia should make the soil produce all of which it was capable with the least expenditure of human energy, because even with unscientific methods she could compete successfully in her agricultural work with other sections of the country; but she cannot compete with them successfully now or in the future unless the agricultural population adopts modern methods of efficiency and economy in every phase of agricultural work.

The Virginia Polytechnic Institute is not now educating and cannot economically educate men for the farms. Practically none of the graduates of the Institute become farmers, in the sense that they actually cultivate the land. Virginia must look to vocational agriculture in the high schools for the education of farmers. It is shown in Chapter LXV, Division X, of this report, that there are already a number of high schools that are offering efficient work in vocational agriculture. The survey staff believe that this work is proving to be well adapted to the needs of Virginia farmers. Emphasis is being laid upon functional agricultural work. The schools are in direct contact with the farms. Boys studying agriculture in the high school apply what they learn on the farm. A considerable part of instruction at school is based on or consists of projects worked out on the farm. The survey staff commend this type of agricultural work which is scientific but at the

same time practical and adapted to the farming situations in the localities in which the work is being done.

It is important that vocational agricultural work should be extended as rapidly as possible to high schools in every section of the State, to the end that every boy on a farm who wishes to prepare for farming may have opportunity to study modern scientific agriculture in a practical and helpful way. The survey staff recommend, further, that the adult farming population in localities in which there are vocational agricultural courses in the high school should be given an opportunity to study agriculture in the evenings. The work for adults should be eminently practical while at the same time being based upon scientific principles.

Virginia Has Made an Encouraging Beginning in Trade and Industrial Education

It was intimated earlier in this chapter that Virginia has not developed industrially as rapidly as many other States less well situated than she is for the successful operation of varied industries. The type of education which has been dominant in Virginia heretofore has not been favorable to the awakening of interest in industrial activities. Trades and industries have not been regarded very favorably by young people preparing for their life work. In fact, it has not been regarded as desirable that those who could prepare for politics, law, the ministry, or medicine should look toward an industrial career. Until very recently, no work in preparation for trades or industries was available in public schools of any kind. But trade and industrial education is getting under way in Virginia now. Detailed data relating to this matter are presented in Chapter LXVI, Division X, of this report. It is shown therein that various types of classes in trade and industrial work are in operation in many places in Virginia.

While the beginning is encouraging, it will be apparent to any one who will read the chapter referred to that Virginia has only made a beginning in this type of education. The need for expansion is very great. The only thing that is retarding the development of trade and industrial work is the lack of resources. The Federal government furnishes a considerable proportion of the funds. The plan in Virginia is for the State to match the Federal contribution, dollar for dollar, and for local communities to do the same. At the inception of the work, the General Assembly of Virginia appropriated adequate funds to match the contributions from the Federal government. Later the Federal contribution was increased but the State appropriation has not been increased. This has thrown an additional burden upon the local communities that have been required to contribute their own quota to equal the Federal contribution, and also to make up the deficit in the State appropriation. This situation ought not to be continued.

The survey staff has evidence to the effect that there is a demand for trade and industrial education in different communities in which there is no provision for such work now because funds are not available. At the earliest practicable moment, the State should establish trade and industrial classes in every community in which there is sufficient demand for them to maintain classes of reasonable size. The aim should be to extend trade and industrial education so that every young man or woman in the State wishing to make preparation for a trade or industry can find classes within reach.

There is Very Great Need in Virginia for the Extension of Library Facilities, Particularly in Rural Communities

Only about 4 per cent of the rural population of Virginia have access to libraries. The urban population are more fortunate, since approximately 88 per cent of people who live in cities are within reach of libraries. If one part of the population must be deprived of library facilities, it would be better if the urban population were so deprived, since people in the cities have means

of employing their leisure time interestingly and profitably much more generally than is true of the rural population. Libraries that would be available to those who live in villages and on farms would yield rich returns in providing wholesome educational and refreshing occupation for people when they are not at work, and in making it possible for adults living in rural sections to continue their education after leaving school.

The survey staff believe that the county library system should be developed in Virginia as vigorously as possible. Data and discussion relating to this matter are presented in detail in Chapter LXIX, Division X, of this report. It is shown therein that the county library plan has been tested in other States, and that it provides the best arrangement for bringing books within the reach of rural people. It is particularly well adapted for Virginia since so large a proportion of the population is rural, and since climatic conditions make it possible for books to be circulated comparatively easily and effectively from a county library. Branches of the county library should be established in sections of the county where they will be readily accessible to the people of each section.

Virginia has not kept abreast of the more progressive States in the nation in providing library facilities for the rural population. The survey staff believe that libraries are necessary adjuncts to the schools. Without library facilities, there is a likelihood that youth will cease in mental growth after leaving school. Throughout the country there is at present a determined effort to promote the mental growth of people after formal education in the schools is terminated. This is being accomplished through the extension of library facilities as well as through evening schools, correspondence work, and the like.

The Cooperative Educational Association of Virginia and the Virginia Congress of Parents and Teachers Are Valuable Supplementary Educational Agencies

Virginia is fortunate in having an efficient cooperative educational association, which has played a prominent role for a long period in promoting education throughout the State. This association has been able to unite citizens and teachers in working for a common cause. In the past it has supplemented the educational work of the schools in an effective way, and it is still a useful agency in extending and perfecting educational facilities throughout the State.

Virginia is also fortunate in having a branch of the National Congress of Parents and Teachers, which is developing with extraordinary rapidity. This organization is pledged to the promotion of the training and welfare of the young. As its name indicates, it fosters cooperation between parents and teachers with a view to the gaining of a better knowledge of the nature of childhood and youth and the improvement of ways and means of promoting the physical, mental, social and moral development of the young. Detailed information concerning the origin, development and program of work of the Cooperative Educational Association of Virginia and the Virginia Congress of Parents and Teachers will be found in Chapters LXX and LXXI, Division X, of this report.

Vocal Music Does Not Play an Important Role in Virginia Education

In most of the States throughout the country, courses of study in elementary schools especially, but to some extent also in high schools, provide a place for vocal music. It is widely believed that every pupil would receive benefit from at least elementary training in vocal music. The survey staff have conducted an inquiry relating to the situation in Virginia, and they have learned that the teaching of music is incidental in some schools. It is not taught at all in many schools. It seems to the staff that, without much additional expense, vocal music could be introduced into all public elementary

schools, including the rural schools, and that it would prove to be of value to pupils.

The chief difficulty in the teaching of vocal music in elementary schools lies in the fact that a large proportion of the teachers are not trained for this work. It would not be expedient for Virginia to refuse to issue a certificate to a teacher who is not capable of giving instruction in vocal music, but it would be desirable for educational authorities to encourage teachers to make suitable preparation for elementary musical instruction. The State teachers colleges and other teacher-training institutions should make it possible for every teacher to receive instruction in vocal music so as to be able to teach it acceptably in the rural and elementary schools of the State. The survey staff believe that the time occupied in musical training in the elementary schools will not detract from instruction in other subjects. A brief period in vocal music in a school every day will serve as relaxation and relief from more exacting studies. Further, the practice of vocal music will promote good feeling and harmony in a classroom.

The survey staff think that wherever it is practicable instrumental music should be taught to pupils and that, if possible, pupils possessing musical abilities should be organized into orchestras for the entertainment of a school. The staff are aware that this suggestion cannot be made applicable to small schools.

Present Practices in Local Financial Accounting can be and should be Improved

It is generally recognized that public education must be administered in accordance with the same principles of business efficiency that govern a commercial institution. The first basic requirement for such effective administration is a sound system of financial accounting, including the most efficient schemes of ordering, requisitioning, paying, delivering, storing, and distributing school supplies. The extent to which financial statistics issued by a State Department of Education are valid and consequently of real service depends upon the type of accounting systems in force in the various local communities.

In order to determine the present practice in accounting of local school monies, sample sets of the accounting systems from twelve county offices and six city school systems were analyzed. These eighteen sample forms were chosen according to the same procedure as in the case of child accounting forms.

Attention is called to the fact that the local systems of financial accounting do not provide for the allocation of receipts and expenditures in accordance with the recommendations of the National Education Association, or with sound principles of accounting, or with State reports. Also, there is no provision made for advancement accounts. The variance of the accounting systems from standard accounting procedure cannot be commended since it makes valid comparisons with school costs in other sections of the country impossible. In some instances, notably Richmond, two sets of books are kept, one in accordance with the State financial report and the other in keeping with the biennial financial report submitted to the United States Bureau of Education. Such a practice is obviously inordinately expensive, and, while it may be commendable under existing conditions, should be entirely unnecessary.

The Function of the State Department in Local School Financial Accounting

One of the most effective ways in which a State department of public instruction can influence local systems of financial accounting is by establishing standard bases for the allocation of expenditures and receipts in the financial report that the local school officers make each year to the State department. The financial section of the annual report which the county and city superintendents make to the State department approaches standard

accounting procedure much more nearly than is true in the majority of States at the present time. However, there are certain fallacies in existing reports that should be corrected immediately. For example, the present report form carries no major account covering coordinate activities. Likewise, *insurance* and *rent* are included under *maintenance*, when they technically fall distinctly under the heading of *fixed charges*. Also, certain items covering transactions that invariably appear among the city systems have been omitted from the present report form.

Virginia is Awakening to the Importance of Education and the Need of State Coordination and Cooperation

The survey staff have been impressed as they have gone about the State with what seems to be a new attitude toward education and especially toward State unity and cooperation. Sentiments recently expressed by President Coolidge and by Secretary Hoover apply peculiarly to Virginia. Says President Coolidge: "A new importance is attaching to the cause of education. A new realization of its urgent necessity is taking hold of the nation. A new comprehension that the problem is only beginning to be solved is upon the people. A new determination to meet the requirements of the situation is everywhere apparent. The economic and moral waste of ignorance will little longer be tolerated. This awakening is one of the most significant developments of the times."

Secretary Hoover in discussing the awakening of the entire country to the importance of training the rising generation said recently:

"The child of today is born into a world which would have staggered his immediate forbears—it is a world moving at a vastly accelerated pace and consequently throws additional strain upon the mental and physical being of the individual.

"It is necessary that we begin to rear a new child for this new world, one who is fully equipped to direct its forces and instruments of power, who can master it rather than be mastered by it. We who are concerned in any way with the betterment of children are engaged in a work of racial defense and it is essential that we summon to the task the most accurate knowledge that science can give us, that we perfect our social machinery and man it with experts, and that we look steadily ahead to a clearly visioned goal."

The survey staff believe that Virginia is ready to go forward as rapidly as conditions will permit in the improvement of the entire public educational system. The people are proud of the status of Virginia among sister States and they are jealous of her prestige. They appreciate today, as they have not appreciated heretofore, the fact that one State cannot keep abreast of other States unless its educational system is extended and perfected as the social conditions in the State become more complex and as neighboring States improve their educational programs. Virginia understands that a community within the State cannot prosper if it is detached and remains isolated from and independent of other communities. In the same way, a State cannot prosper unless it takes account of and is governed by the development and activities in other Commonwealths. This awareness in Virginia and the determination to deal with education as a State function mainly should make it possible for Virginia speedily to accomplish all that is recommended in the report of the survey staff.

CHAPTER III

A CONSTRUCTIVE PROGRAM FOR VIRGINIA

Based upon their findings in their study of the public educational system of Virginia, as summarized in Chapter I, and as presented in detail in the various divisions of this report, the survey staff submit the following series of recommendations for the improvement of the educational work of the State:

I. Rural Education

The findings of the survey staff and the discussion thereof, upon which the recommendations relating to rural education are based, are presented principally in Division I, but also in Divisions IX, X and Appendix I. The survey staff recommend that:

(1) The State should enter immediately upon a program of *extension* and *betterment of rural education* in the several ways outlined in Division I of this report. It is recommended that in the program of educational betterment the improvement of rural education should receive the attention of the people of Virginia first and principally.

(2) The work of *consolidation of rural schools* should be pushed forward as rapidly as economic conditions will permit. The isolated one-room school cannot meet the educational requirements of the rural population of Virginia in respect to courses of study, methods of instruction, educational equipment, hygienic buildings and environments, and adequately prepared teachers.

(3) There should be established immediately a certification requirement which will prevent any one from teaching in a rural school in the State who has not had the equivalent of a high-school education and one year beyond this of professional training in a teachers college or in some other teacher-training institution approved by the State Department of Education.

(4) The State should immediately enter upon a program of improvement of the economic status of rural-school teachers. The median salary of teachers in rural schools should be raised as rapidly as possible, so that it will be on a par with the median salary of teachers in elementary schools in cities. In no other way can a properly and adequately trained and personally qualified staff of teachers be secured and retained in the rural schools.

(5) The State should enter upon a program of extension and improvement of supervision of teaching in rural schools in accordance with plans presented in Division I of this report. As rapidly as possible, the State should develop the supervisory system, so that every rural teacher will have the benefit of expert supervision.

a. There should be at least ten additional supervisors appointed in the counties every year; this will require seventeen years to provide a supervisory force adequate for the proper supervision of rural education on the basis of one competent supervisor for every fifty teachers.

b. County superintendents should be required to have training and, if practicable, actual experience in supervision, so that they may cooperate in the work of aiding teachers in the schools under their charge. There should be provided for county superintendents courses in supervision adapted to their needs, in the summer session of the University of Virginia preferably. In other ways, outlined in Division I, county superintendents should be required to extend and improve their preparation for supervision of rural schools.

(6) There should be added immediately at least one member to the rural school staff in the State superintendent's office, to the end that assistance may be rendered supervisors and county superintendents to improve their work in the supervision of rural education.

(7) The principalship should be developed more fully than it is in some of the counties. The principal should be required to have training and, if practicable, experience in supervision before he is appointed to a principalship.

(8) As rapidly as possible, the State should establish and enforce the regulation that a county superintendent or a principal or a supervisor should not be engaged in noneducational work at the time of his appointment to an educational office. It is shown in Division I that some county superintendents and principals were at the time of their appointment engaged in professions or vocations that had no connection whatever with school work, and probably they were not fitted for the duties of superintendent, principal, or supervisor.

(9) Since the duties of a county superintendent or principal have to do largely with elementary education, no person should be selected for either position who has not had training and experience in elementary education.

(10) In the choice of members for county boards of education, the citizens in every county should be encouraged in every practicable way to select the majority of members under forty-five years of age. Data presented in Division I show that the tendency in selecting members of county boards of education is to choose older, as compared with younger, persons. Desirable progress in rural education probably would be promoted by selecting younger rather than older members for county boards.

(11) The separate district should be permitted, but its establishment should depend upon other factors than mere size of population. The State Board of Education should be given authority to establish separate districts upon the recommendation of the county board of education.

(12) The district tax should be discontinued in favor of a county tax, in order that higher standards in rural education may be maintained.

(13) Each county should be required to levy a tax that will secure a fund for each full-time teacher employed equal to the average raised from rural sources in all counties of the State during the preceding year.

(14) Funds for stimulating and assisting standardized schools should be continued and additions thereto be made as conditions warrant.

(15) A much larger equalization fund should be established by the State than is the case at present, in order that relatively impoverished sections may maintain schools of approximately as high quality and efficiency as schools in sections of the State better situated financially. The State should regard education as primarily a State and not a local function or responsibility. The State should follow the policy of providing for all its children educational advantages of substantially the same quality. The distribution of an equalization fund should be determined on the basis of the capacity of the schools in different sections of the State to maintain educational facilities of standard quality for all the children in the respective communities.

(16) There should be more general employment of school principals and teachers with a sympathetic understanding of the problems of country life and training which will make them efficient in dealing with those problems. A very large percentage of the rural school principals and teachers at present do not have such understanding or training.

(17) There should be increased attention in rural schools to instruction in agriculture, and the social and economic problems of country life. At present only a small percentage of the communities of the State have the advantage of systematic school instruction in such subjects. In fact, less than one in twenty of Virginia rural boys and girls between the ages of fifteen and eighteen are receiving school instruction in agriculture and home economics (detailed data are presented in the chapters on vocational agriculture and home economics in the public schools) and only a fraction of this number are giving much study to the social and economic questions now confronting country life. One of the most serious results of this whole situation is that there is not developed in young people in rural sections a sufficient foundation of scientific attitude and cooperative spirit so that later on they can make intelligent use of the information to be had from government

publications, the agricultural press, county and home agents, and other public service agencies.

(18) There should be increased support of the 4-H club work, and closer correlation of this work with the regular school system. With the rural conditions now prevailing, and which are likely to prevail for some time to come, the 4-H club work can be made one of the most effective means of promoting rural-life education. It seems to be the only medium through which a large percentage of rural children can receive such training. For this work to reach maximum efficiency and develop to its full potentialities, however, it must be more fully recognized as an important phase of the educational system of the State, and as such it should be given more general support than it is now receiving. It is essential, furthermore, if this work is to reach maximum efficiency, that it shall be guided, somewhat more fully than is now the case, by generally accepted educational principles and policies.

(19) The rural schools should exercise more leadership than they are now doing in promoting (a) systematic study among adults of policies dealing with problems confronting rural life; and (b) concerted effort for putting desirable policies into effect. This will involve provisions for better library facilities for the country population, a matter which is discussed in detail in the chapter on libraries as supplementary education agencies in Virginia. It will also involve increasing utilization of possible aids from various types of public service workers.

(20) The administrative system of rural education should be modified as outlined in Division VII of this report. A specific recommendation relating to this matter is made in connection with other recommendations affecting administration and supervision of education in the State.

II. Elementary Education in Cities

The detailed facts and discussion upon which recommendations relating to elementary education are based will be found principally in Division II. The survey staff recommend:

(1) Superintendents, principals, and teachers should devote themselves to a reconstruction of the curriculum of the elementary schools with a view to discarding all subjects and topics that have persisted in the curriculum from an earlier day when it was thought that mere formal study was valuable for culture and for training mental faculties. Virginia should be kept abreast of educational progress throughout the country so that the elementary course of study may be revised in accordance with modern needs. Topics and branches should be introduced into the curriculum that relate to the physical, social, economic, and hygienic situations which pupils will encounter in their life outside of the schoolroom.

(2) Teachers should adopt methods of instruction which will develop pupils' resourcefulness, initiative, selfreliance, and aggressiveness in solving actual problems. The problem or project method should be substituted for mere recitation. There should be concerted effort in the elementary schools of Virginia to make pupils dynamic in the mastery and actual use of the knowledge and skill they acquire in school.

(3) Supervision of elementary education should be extended and perfected. The purpose of supervision should be not to detect whether teachers are following programs prescribed by those in authority but rather to lead teachers to take a modern view of educational work and to arouse their interest in vital, dynamic methods of instruction. The supervisor should be a coworker and leader, not merely an inspector. It is of chief importance in Virginia that teachers should play a larger role than they are now doing in determining courses of study, methods of teaching, and policies of school organization and management.

(4) A program of classifying pupils according to ability should be entered upon at once in all Virginia elementary public schools. Groupings should not be made entirely on the basis of tests of intelligence. Physical maturity, social development, personal and environmental factors should be considered in the grouping of pupils.

(5) School work should be adapted to the capacity and needs of different groups in every elementary school. Work should be planned for each group which will enable a very high percentage of the members of the group to complete the work. Every effort should be made in elementary schools to prevent a large amount of over-ageness in any classroom. The standards of promotion for the pupils in one group should not be made the standards for promotion in an abler or a less able group. Superintendents of schools should cooperate with teacher-training institutions in assisting these institutions to train teachers who will be familiar with present-day views concerning differences in the abilities of pupils and ways and means of adapting work to the needs of different groups.

(6) The problem of textbooks in the elementary schools of Virginia is a serious one. Since no change can be made until June 30, 1930, it is recommended that appropriate representative committees be appointed to study textbooks from the point of view of their usefulness in a revised program of work in Virginia elementary schools, in which topics and branches that will be functional or practical in the every-day lives of the people of Virginia will be emphasized, and also in which dynamic methods of instruction instead of mere recitation methods will be adopted. Textbooks now play a very important role in the classrooms of Virginia, and it is highly important when a change is made that modern texts be substituted for those that are based on earlier conceptions of curricula and methods of instruction.

(7) Too much stress cannot be laid upon the necessity of securing the co-operation of classroom teachers in revising the program of work in the elementary schools of the State. Vital, dynamic, efficient teaching cannot be done if teachers simply execute in a mechanical way instructions issued to them from those in authority. The teachers must themselves become dynamic in the study of educational problems with a view to adapting their work even more completely to the needs of pupils in the localities in which their schools are located.

III. Secondary Education

The facts and findings of the survey staff upon which recommendations relating to secondary education are based are presented in detail in Divisions III and IX of this report. The survey staff recommend that:

(1) High-school education should be regarded as a State and not a local function or responsibility; therefore the State should provide adequate aid to enable local communities to provide a modern high-school education for all children who desire it and who are qualified to take advantage of it.

(2) A high school should be regarded as a people's college and not primarily as a preparatory school for college. The program of studies in a high school should be determined by local, social, civic and vocational needs rather than by entrance requirements for college.

(3) Courses in applied science, adjusted to local conditions so far as feasible, should be emphasized in all high schools in Virginia. Less emphasis should be placed upon linguistic and symbolic studies than has been done heretofore. High schools should be equipped to give pupils adequate instruction in physical and biological sciences in their relation particularly to the intellectual and physical needs of Virginia people.

(4) All public high schools should offer such courses as home economics, commercial work, manual work, home mechanics, and automobile mechanics.

(5) In high schools with less than four teachers no foreign languages should be offered unless a majority of pupils demand it. The higher State-supported institutions should admit pupils without penalty who have not completed courses in foreign languages in the high schools.

(6) The State Superintendent of Public Instruction, through his staff of specialists, should in every possible way impress upon those who are responsible for the programs of high schools that the chief need in Virginia at present is to train pupils in high schools so that they will be interested in realism and capable of dealing with *real* problems as they are encountered in every-day life in Virginia. It is not intended in this recommendation to advise that genuine cultural work be neg-

lected in the high schools of Virginia, but the survey staff believe that pupils can receive culture from the pursuit of subjects that will awaken their interest in actual physical and social conditions in Virginia and train them to deal effectively with these conditions. Surely culture does not depend upon the mastery of any particular branch of study in a high school. It would be well if Virginia people would redefine culture so that it would mean the acquisition of knowledge and skill which would enable one (1) to pull his own oar, (2) to understand the people about him and to adjust himself to them, and (3) to play a useful and honorable role as a neighbor and citizen. It would be particularly serviceable in Virginia at the present moment if teachers and others would abandon the view of culture, which assumes that it consists in learning materials that cannot be functional in every-day life in Virginia. The survey staff believe that branches of study that will be of functional value in the life of Virginia people should be preferred above those that have only supposed cultural or disciplinary value.

(7) The movement to consolidate small, weak high schools into larger and better equipped schools should be pushed forward as rapidly as possible.

(8) The adoption of a program of a six-year elementary school, a three-year junior high school and a three-year senior high school should be carried forward as rapidly as possible throughout Virginia.

(9) A program of educational and vocational guidance should be instituted as soon as possible in every high school in the State.

(10) With a view to improving the work of the high schools, the superintendent, principal, and faculty of a high school should be granted permission to adopt an optional list of textbooks and not be compelled to use only the uniform State-adopted textbook list.

(11) In small high schools the following offerings should be made in addition to those generally found in such schools:

- a. A one-year course in European history in the place of the present two-year course.
- b. A course in vocational civics or occupations.
- c. A course in business practice.
- d. A two-year course in home economics.
- e. A course in farm and home economics.

(12) The program of work should be varied in every high school so that the needs of pupils of differing abilities and interests may be provided for.

(13) High-school faculties should follow a policy of discouraging pupils from pursuing too many subjects at the same time and acquiring only a superficial verbal, non-functional mastery of any of them. It should be impressed upon pupils that the only justification for pursuing any study is to acquire it so that it can be used in the situations in daily life to which it relates.

(14) High-school programs and methods of teaching should be based more than they are at present upon the policy that whatever is gained in the high school should be used outside of the school. The aim in teaching should be to have the pupil pursue a subject as nearly as possible in the way in which he will need to employ the knowledge he gains in real life.

(15) The aim of formal discipline should be abandoned in every high school in the State. No topic should be taught merely for mental discipline. Following this policy, topics that are now taught in various branches in the high schools should be eliminated, and topics relating quite directly to physical and social conditions in Virginia should be emphasized.

(16) A high-school education should be made free to all the children of the State who are eager and who are qualified to take advantage of it. The State should assist local committees to transport pupils to high schools.

(17) There should be a concerted movement throughout Virginia to encourage men to engage in high-school teaching. To this end, the economic and social status of high-school teaching should be, as speedily as possible, placed on a par in Virginia with high-school teaching in other Commonwealths with which Virginia should keep abreast.

(18) The salaries of high-school teachers should be raised so that Virginia may retain the teachers who are most capable. They are now lured into business or attracted by other States in which the rewards for teaching are much more liberal.

(19) Teachers in the high schools of Virginia should keep abreast of educational progress by attending summer schools and pursuing correspondence courses in education. To this end, boards of education should offer bonuses to high-school teachers who continue their professional preparation while in service.

(20) The supervision of high-school teaching should be improved, to the end that every teacher in service may have the advice and guidance of a capable principal or superintendent. Particular attention should be paid to various defects in teaching mentioned in Division III of this report, which defects have been observed in the classrooms of Virginia high schools that have been visited.

(21) Provision should be made for playground and gymnasium facilities for both boys and girls in every high school. The movement in Virginia, as described in Chapter LXVI, Division X of this report, is heartily commended by the survey staff, and it is recommended that it be pushed forward vigorously.

(22) When other pressing needs have been provided for, high schools should be equipped as rapidly as possible with moving-picture machines, stereopticons, radios, reading rooms and similar advantages which are of service in supplementing the regular instruction of the school and in providing pupils with needed relaxation.

(23) The high school should be made a community center. All the facilities in a public high school should be available for community recreation, educational extension, social gatherings of parents and teachers, and so on. Boards of education should welcome requests from community organizations for the use of high school buildings after school hours.

IV. Higher Education

The findings of the survey staff and the discussion thereof, upon which the recommendations relating to higher education are based, are presented in detail in Divisions IV, V, and IX of this report. The staff recommend:

(1) That in order to secure coordination and cooperation in the work of the University of Virginia, the College of William and Mary, the Medical College of Virginia, the Virginia Polytechnic Institute, the Virginia Military Institute (if continued), the four State teachers colleges, and the Normal and Industrial Institute at Petersburg, there should be created the office of Chancellor of Higher Education. The status and functions of such a chancellor are outlined in Division IV of this report. In brief, the chancellor should be charged with the responsibility of securing coordination among the higher institutions, so that the scope and character of the work of each institution shall be of the greatest service to the State, and so that there shall not be needless duplication of work among the institutions. It is not intended that the chancellor should deprive any institution of its independence or its initiative, or should assume the function of president or exercise control over the internal administrative work of any institution except in so far as the need for coordination in the work of the several institutions in order to secure economy and efficiency and to avoid wasteful duplication may require that an institution be restricted in the range of its offerings. The chief function of the chancellor should be to work out such a program of higher education that each institution will be responsible for the type of work that it is best equipped to perform and that is most needed by the State, regardless of institutional completeness or ambition. The chancellor should prevent any institution from expanding its program of offerings merely to become a complete college, university, or technical institute, regardless of work done in other institutions.

If the office of Chancellor of Higher Education be established, then the recommendations that follow are made for his consideration; but if the office be not created, then the recommendations are urged by the survey staff for immediate legislative and administrative action.

(2) In order to avoid duplication and to promote efficiency in the engineering work in the University of Virginia and the Virginia Polytechnic Institute,

it is recommended that a plan of cooperation be developed whereby certain phases of engineering will be undertaken at one institution and certain phases at the other, according to the facilities at each institution; and engineering students should complete part of their work at Blacksburg and part at Charlottesville.

(3) No work of graduate standing or credit should be undertaken at the College of William and Mary for the present.

(4) At the Virginia Polytechnic Institute all work of the nature of liberal arts should be eliminated. Neither the course in business nor the course in home economics should be developed so as to require the offering of liberal arts work, though courses basal for business or home economics should be offered.

(5) All liberal arts work as such should be restricted to the University of Virginia and the College of William and Mary.

(6) At the Medical College of Virginia all basal sciences or preliminary work should be eliminated. Such work should be restricted to the Virginia Polytechnic Institute, the University of Virginia, the College of William and Mary, and the Virginia Military Institute (if this be continued).

(7) All undergraduate courses in any of the higher institutions, except the Medical College of Virginia, with an enrollment of less than ten students for three consecutive semesters, should be discontinued. Tables showing in detail the number of classes with an enrollment of less than ten during the first semester of 1927-1928 will be found in Appendix I of this report. A summary and discussion of the data presented in these tables will be found in Division IV.

(8) The State should cease to make appropriations to the Virginia Military Institute. The property should be offered free to the alumni of the institution on condition that they will maintain it at all times up to its present standard as a military institution, failing which the institute should be converted into a vocational institute which will provide vocational education for all properly qualified male high-school graduates.

(9) The University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, and the Virginia Military Institute (if continued) should emphasize applied science. The sciences should be accorded as prominent a place for entrance and for a degree as foreign languages, the English language, or mathematics. Faculties of the higher institutions should, so far as proper and practicable, encourage pupils preparing for college in secondary schools to devote their attention to the sciences—physical, biological, and social—as fully as to any other branch.

(10) The higher institutions should devote their resources to improving the work now being generally elected by students, rather than to increasing the range of their offerings in order to become more comprehensive or complete universities. Each institution should be governed by the aim of serving Virginia, rather than of attaining institutional distinction by spending its resources in ways that are not urgently demanded for the promotion of the material and social well-being of the citizens of Virginia. No new course should be offered in any of the higher institutions until it is demanded by at least ten students, and, as recommended above, no course should be continued that is not elected by at least ten students.

(11) The State should immediately enter upon a program which will rapidly bring the University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute and the Medical College of Virginia up to the standard of colleges in States with which Virginia is in competition and with which it desires to keep abreast, educationally and otherwise. This should be accomplished in one of the following ways:

(a) By continuing the present policy of appropriations to higher institutions and permitting all qualified students to enroll in any institution upon paying a nominal fee, and by increasing the salaries of capable members of the faculty at least twenty per cent, the maximum for a full professor to be \$6,000.00 and the minimum in the various classifications of the instructional forces to be at least twenty per cent above what it is at the present time. If the Virginia Military Institute is continued as at present, the salaries of the faculty should be placed on a par with the salaries of members of the faculty

in the other higher institutions, so that capable members may be secured and so that it will not be necessary to replenish the faculty with graduates of the Virginia Military Institute who have not had much training or successful experience since graduation. If the institute is converted into a junior college, the salaries of the members of the faculty should be on a par with salaries in other higher institutions.

(b) If the State does not follow the policy indicated in (a) above, then it should provide only the physical plant and equipment for each higher institution, and each institution should charge a tuition fee from non-State scholarship students adequate to provide a fund for maintenance on a par with the higher State-supported institutions in States comparable with Virginia.

(c) If the State follows the policy indicated in (b), then a loan fund should be established for the purpose of enabling students of ability, but without means, to complete a course in any of the higher institutions. If such a fund be established, the Comptroller and the Director of the Budget should be responsible for presenting a plan for the administration of the fund which will meet the needs of Virginia.

(d) If the State does not wish to follow the policies indicated in (a), (b), (c), it should adopt a plan of State scholarships to be awarded to students of exceptional ability and character, which scholarships should entitle the holders to free tuition at any of the higher institutions. The State should determine the number of State scholars which should be granted free tuition at each of the higher institutions and there should be appropriated to each institution an amount equal to the cost of the tuition of the State scholars in attendance. All students not holding State scholarships should pay a tuition fee to cover the cost of tuition. The same fee should be paid by out-of-State as by Virginia students not holding scholarships.

(e) If the State follows the policy indicated in (d) there should be constituted a committee composed of the deans of the departments or schools of education at the University of Virginia and the College of William and Mary, the State Superintendent of Public Instruction, and the presidents of the University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, and the Medical College of Virginia, which committee should determine effective methods of selecting the most capable students in the State for State scholarships. It should be provided that the proportion of State scholarship students should be proportioned among the rural and city populations in proportion to the school population of rural districts as compared with the cities. Provision should be made so that men and women will be selected without discrimination as to sex.

(12) Whatever policy the State pursues in respect to provision for higher education, it should institute a system of selection so that only those students who possess in high degree the type of mental ability required for success in collegiate work should be admitted to any of the higher institutions. For all high school graduates who wish to continue their education, but who are not adapted for collegiate work, or for those who do not possess the means to complete a collegiate course, facilities for vocational education should be provided, and the State should promote the development of vocational guidance in the high schools for the purpose of diagnosing the aptitudes of students and advising those who are not adapted for collegiate work to make preparation for the vocation for which they are best fitted.

(13) The State should immediately extend the facilities for the higher education of women in one of the following ways:

(a) By providing that women shall be admitted on the same terms as men to all courses at the University of Virginia;

(b) By providing that women properly qualified shall be admitted to the College of William and Mary in preference to men when there is not room for all those who make application for entrance;

(c) By converting the Harrisonburg State Teachers College into a college of liberal arts for women coordinate with the college of liberal arts of the University of Virginia.

(14) Adequate provisions should be made at the University of Virginia for research in the physical, biological, medical, and social sciences, including education. Provision for research in the social sciences is being made temporarily by private endowment; but when the funds from the endowment are exhausted, the State should supply the necessary funds to continue the work. At the College of William and Mary, provision should be made for research in the physical, biological, and social sciences, including education. At the Medical College of Virginia provision should be made for research in the medical sciences. Virginia Polytechnic Institute now receives funds for research from Federal sources; the State should supplement Federal funds by grants for research work as specified in (18) below.

(15) In the aid of research work, the executive officers of the higher institutions should be instructed:

(a) To adjust the teaching load of capable members of the faculty in the departments in which research work should be encouraged so as to allow time for research work;

(b) Clerical assistance should be provided for research workers, with a view to reducing the time devoted to routine and clerical work;

(c) Productive research should be rewarded by suitable promotions in rank and increase in salary;

(d) Leave of absence with pay should be granted for research workers who have shown they can utilize leave of absence for the promotion of their research work;

(e) As rapidly as possible research professorships should be established;

(f) Members of the faculty should be aided by financial assistance to attend the meetings of learned societies in their particular field, so that they may be stimulated and encouraged to do productive work.

(16) Research work in each and all the higher institutions should for a considerable period be directed toward the promotion of the material and social advancement of Virginia. Funds for research should be expended for work having to do with Virginia physical and social conditions rather than for pure research having no immediate or direct reference to conditions in Virginia. In due course, funds should be provided for research in every field of knowledge without special reference to Virginia problems, but research of this type should be deferred for the present.

(17) The State should not contribute to the support of junior colleges that are established as extensions of high school courses. State junior colleges should not be established until the rural, elementary, secondary, higher, and teacher-training institutions are put on a par with the public school system in States with which Virginia wishes to keep abreast. If the Virginia Military Institute is converted into a vocational college, the State should give it adequate support, so that it may receive high school graduates and prepare them for vocations and also for professional courses.

(18) In addition to needs specified above, the higher institutions are imperatively in need of the following:

(a) The University of Virginia—

1. Increase of salaries of capable members of the faculty at least

20 per cent, with maximum of full professor raised to \$6,000.00.

2. A dormitory for women students in professional courses.

3. Dormitories adequate to accommodate all freshman students at least.

4. Adequate laboratory facilities for the teaching of pure and applied science, especially the latter.

5. Adequate provision for research in physical, biological, medical, and social sciences, including education, with special reference to problems in Virginia.

6. Adequate provision to care for all graduate work of the State both for men and for women.

7. A fund for repairs adequate to repair and preserve the older buildings and keep them intact for the future.

8. Practice schools of elementary and secondary grade, so that the school of education may train adequate teachers for high school positions and also superintendents, principals and supervisors.

9. Adequate resources for the expansion of extension work, so that the university may serve any community in the State requesting extension service.

(b) The College of William and Mary—

1. Increase of salaries for capable members of instructional staff at least 20 per cent, with maximum for full professor raised to \$6,000.00.

2. Facilities for the school of education to provide practice work and prepare teachers properly for high school, supervisory, and administrative positions.

3. A full-time professor in secondary education.

4. A building to house the school of education and departments of home economics, fine arts, and physical education.

5. Addition to the staff of the school of education of supervising teachers in charge of students preparing for teaching positions in the State.

6. A fund to strengthen the summer school so that capable instructors may be secured. The salaries for capable instructors should be increased at least 20 per cent beyond what the practice has been heretofore.

7. Adequate provision for expanding the extension work, so that the college may carry on extension work in any community in the State which desires such work and which can provide a sufficient number of students to warrant the organization of classes.

8. An adequate fund to repair and preserve the older buildings on the campus, to the end that none of these buildings may be allowed to disintegrate.

9. An adequate fund to provide for maintaining laboratories in pure and applied science, especially the latter.

(c) The Virginia Polytechnic Institute—

1. Increase of salaries for capable members of the instructional force at least 20 per cent, with the maximum for full professor raised to \$6,000.00.

2. Adequate provision for a fund to supplement Federal funds for the promotion of research in every phase of agriculture and engineering in Virginia.

3. Funds adequate to provide for instruction in and encouragement of horticulture, dairying, poultry producing, trucking, veterinary science, forestry, development of water power, rural electrification, and the use of power and machinery on the farm and in the farm home.

4. A fund adequate to complete a soils survey of the entire State and the dissemination of the facts gained and their bearing upon agriculture of the State through publications and institutes.

5. A fund to promote investigation of and instruction in rural social science and the dissemination of knowledge in rural sociology among the rural population of the State through publications and institutes.

6. Adequate provision for expansion of extension work in agriculture, engineering, and rural sociology.

7. A fund for the maintenance of summer work in home economics and rural social service.

8. A radio broadcasting station for the purpose of broadcasting information designed to disseminate knowledge which may be of interest or value to rural people.

9. Adequate provision should be made for resident and extension service in industrial chemistry as it relates particularly to conditions and possibilities in Virginia.

10. Provision should be made for instruction in coal mining and in architectural and structural engineering adapted to the conditions in Virginia.

11. The institute should be adequately equipped for resident and extension instruction in all branches of applied science affecting home and farm life.

12. The institute should be equipped to give instruction in business methods essential for the rural population, including co-operative marketing but not including commercial or industrial work.

13. The institute should have an adequate fund to provide dormitory facilities and laboratory, instructional, and practice facilities for home economics, so that women may receive a modern training in all phases of this subject.

(d) The Medical College of Virginia—

1. Salaries adequate to secure and retain competent and capable full-time instructors.

2. Adequate provision for extension service in the health field, to the end that the resources of the college may be available for people in any section of the State. A fund of \$5,000 should be provided immediately for this service and should be increased as the demand increases.

3. The State Public Health laboratory should be assigned to the college and be maintained by the State, to the end that health problems peculiar to Virginia may be studied in the laboratory.

4. The Medical College should be equipped to conduct research in respect to diseases peculiar to Virginia.

5. The college is in need of enlarged provision for dental education. There should be an immediate addition of one full-time instructor in this department.

6. It is imperative that a school of nursing should be maintained at the Medical College with special provisions for pediatrics and obstetrics nursing.

7. The Medical College has secured its physical plant largely from private gifts. The State should immediately supplement what has been received from private gifts by providing for a new laboratory for chemistry, pathology, and bacteriology, and a building for clinical dentistry. As soon as possible, the State should provide dormitories for men students and extend dormitory facilities for women, if the enrollment of women at the college for nursing or medical education increases.

V. Training and Certification of Teachers

The findings of the survey staff, together with the discussion thereof, on which the recommendations relating to the training and certification of teachers are based, will be found in Divisions I, II, III, V and VI, especially in Division V. The survey staff recommend:

1. That there be appointed a Chancellor of Higher Education, who will have charge of all higher institutions with a view to securing coordination among them. The scope and character of the duties of this chancellor are outlined in Division IV of this report. A further recommendation relating

to the Chancellor of Higher Education will be found in group IV of the series of recommendations.

2. The salary scale for teachers in the State teachers colleges should be increased at least 20 per cent, so that the colleges may secure and retain a capable faculty comparable in training, ability and experience with faculties in teachers colleges in other States.

3. The teachers colleges at Fredericksburg and East Radford do not now have adequate facilities for practice teaching in the high school, and the State should not at present provide such facilities. The University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, the teachers college at Harrisonburg and the teachers college at Farmville are equipped to prepare all the teachers that are needed for the high schools of Virginia for the present and probably for some years to come. If Virginia establishes a college of liberal arts for women, a teacher-training department should be provided, which will further increase the facilities for training high-school teachers. At the same time, Virginia is not training a sufficient number of teachers for the rural schools and elementary city schools. When the requirements for certification mentioned below are put into effect, as they should be without delay, it will be necessary for and it should be required that *all* the teachers colleges should devote their resources very largely, and the colleges at East Radford and Fredericksburg wholly, to the training of teachers for rural and for elementary city schools.

4. All the teachers colleges should immediately establish a one-year training course for teachers in rural schools, and the work in this course should relate specifically to the needs of rural school teachers.

5. The teachers colleges should establish branches in their respective areas for the training of rural school teachers especially. These branches should be planned and administered with reference solely to the training of rural school teachers. The teaching staff in these branches should be members of the faculties of the teachers colleges with which they are severally connected. The branches should be abandoned or changed from one position to another as circumstances warrant. Correspondence work should be offered by all the teacher-training institutions. There are many ambitious teachers who are so far away from the centers where extension courses can be organized that they cannot avail themselves of extension opportunities. Such teachers should not be barred from collegiate study off the campus.

6. The teachers colleges are all in need of increased dormitory facilities, and the need will be accentuated as time goes on because the enrollment at each college will be increased when the new certification requirements take effect. Additional dormitory facilities should be provided at once.

7. The elementary certificate, which at present is valid for six years and renewable for another six years, should be made valid for only two years and be renewable for periods of two years, if during the life of the certificate the holder thereof shall earn two session hours of credit in professional training.

8. The normal professional certificate, which is valid for ten years, and renewable for another period of ten years, should be valid for three years and renewable for another three years, if during the life of the certificate the holder thereof shall have earned two session hours credit.

9. The collegiate professional certificate should be made valid for a period of five years only and on its expiration be made convertible into a life certificate, providing that the holder thereof shall have taught successfully for three years, which teaching may be done preceding the receipt or during the life of the certificate. The purport of this recommendation is to induce teachers to continue professional study after they begin teaching and to make sure that the life certificate is issued to no one who has not achieved success as a teacher.

10. The special certificate for teaching in high school which is now given on the completion of two years of college work should be discontinued, since it is evident that the State will have a sufficient number of full college graduates to take care of its high schools.

11. A minimum professional requirement should be set up for every certificate granted. At present the State Board issues a collegiate certificate to persons who are college graduates, irrespective of whether they have taken any education courses. The survey staff believe that this practice should be discontinued and that no person should be legally qualified to teach who has not made at least a minimum preparation for the work he is undertaking to do. In the judgment of the survey staff the minimum requirement of professional preparation should be fifteen semester hours and should include observation and practice teaching. The date at which this requirement should go into effect should be set far enough ahead so that the colleges of the State may have time to make the necessary adjustments.

12. The survey staff believe that it is for the welfare of Virginia that a closer relationship between the teachers colleges and the University of Virginia should be established, to the end that graduates of the teachers colleges may continue their study in the graduate school at the University. It seems desirable and entirely practicable that at least one course of study should be offered at the teachers colleges which will be recognized as full preparation for graduate work at the University, and it is recommended that this regulation be established.

13. The preparation of teachers of special subjects, such as teachers of commercial branches, physical education, home economics, etc., should be so distributed by the Board of Education among the teachers colleges that there shall not be duplication of effort and needless expenditure. As new demands for special teachers and supervisors arise, this principle of distribution should be applied.

14. With a view to securing professionally trained teachers in the rural and elementary schools, every person preparing for high school teaching in the teachers colleges, in the College of William and Mary, and in the University should prepare also for teaching in the intermediate grades of the elementary school. The general education courses, as well as the content studies in the four-year courses given at the teachers colleges, are applicable to either high school or grade teaching. Consequently, the additional courses that need be taken by one fitting for high school work to qualify her to teach in the intermediate grades could easily be taken as electives.

VI. Negro Education

Detailed data and discussion upon which recommendations relating to negro education are based will be found in Division VI of this report. The survey staff recommend:

1. That for the sake of comfort, sanitation, and health, new, larger and properly constructed schoolhouses be erected for negro children in the rural districts as rapidly as possible.

2. That in the interest of economy and efficiency, increased efforts be made at consolidating rural schools for negro children.

3. That improved equipment in sufficient amounts and the necessary school appliances be required for the rural schools.

4. That compulsory school attendance laws be made applicable to negro children in both rural and urban schools.

5. That school terms of at least seven months be made a legal requirement.

6. That greater efforts be made to secure properly trained, efficient teachers for the rural and small town schools.

7. That such salaries be paid colored teachers as will retain the abler ones in the service and attract to it more capable and better prepared new teachers.

8. That the elementary work of the county training schools be so strengthened and improved that it may serve as an attractive model to the other rural schools.

9. That county training schools be given the necessary equipment and teaching force to do standard high school work and to make their science and vocational work effective.

10. That increased and improved supervision be given the rural schools especially.

11. That high schools for colored youth be increased in number, in order to supply more entrants for the teacher-training and other colleges of the State.

12. That increased facilities for the training of colored teachers be provided, and, to this end, that accommodations be largely increased at the Virginia Normal and Industrial Institute.

13. That the course of study in rural elementary schools for the negroes be adapted to the needs of the negro population and that negro education be differentiated to some extent from the education for whites.

14. That adequate provision be made for efficient secondary and higher education for gifted negro boys and girls, so that they may prepare for the professions and become leaders among their people.

VII. Administration and Supervision

The findings of the survey and the discussion thereof, upon which the recommendations relating to administration and supervision are based, will be found in Division VII of the report. The survey staff recommend:

1. The proposed amendment to the Constitution providing for appointment of the State Board of Education by the Governor for a four-year term is in general accord with modern State administrative practice, and its adoption is recommended by the survey staff.

2. The State Board of Education should have, in general, the legislative and judicial powers which it now holds. Although the proposed amendment to the Constitution places in the hands of the General Assembly the right to determine the extent of the legislative powers of the State Department of Education, the same amendment legalizes all present rules and regulations of the State Department of Education. It is recommended to the General Assembly that it approve such future rules and regulations as the reorganized State Board of Education shall, after proper deliberation and study of the educational conditions of the State, recommend.

3. The State Board of Education should be given the power to appoint the Superintendent of Public Instruction, to fix his salary and to determine his duties. Attention is called to section 131 of the proposed amendments to the Constitution of Virginia, which gives the Governor the power to appoint the Superintendent of Public Instruction for a term of four years. The proposal is unwise. The Governor carries full responsibility through his power to appoint members of the State Board of Education. The State superintendent is the chief executive officer and expert of the State Board of Education. This expert officer should not be under any political control. In some States where this method of selection has been practiced, the office of Superintendent of Public Instruction has been used as a political reward, with a view to strengthening the political machine of the dominant political party of the State. The survey staff recommend the application to State educational affairs the best administrative practice of large business concerns. This involves the granting to the State Board the right to appoint its own officers. Under the method recommended in the proposed amendment to the Constitution, power is given to the Governor to appoint the Superintendent of Public Instruction, and the proposed amendment provides further that the General Assembly

shall have power after January 1, 1932, to provide by enactment for the election of the superintendent in such manner and for such term as may be prescribed by statute. This makes possible still another change in the method of selection of the superintendent within a five-year period. Virginia can ill afford the educational cost of such frequent readjustments.

4. It is recommended that the Superintendent of Public Instruction be the executive officer of the State Board of Education, but not a member of the board.

5. An analysis of the present objectives and activities of the State Department of Education is given in Appendix I. In view of the fact there set forth that the staff of the State Department of Education is inadequate in point of numbers to assume the direct responsibility either of close supervision or inspection of the public schools of the State, the survey staff recommend a change of emphasis in its activities from the field of supervision and inspection to the field of stimulating local supervisory activities, local curriculum revisions, research and experimental work in improvement of instruction in local supervisory units, etc. The following statements of the functions of the State Department of Education are suggestive of a change of emphasis which will undoubtedly operate to elevate the importance of the local unit of education, and will bring about local professional educational stimulus more widespread in its effect than that induced through the large amount of field visitation and schoolhouse inspection which is typical of the activities of the State Department of Education at the present time. That the State Department is conscious of this need for change in emphasis is evidenced by the fact that 341 days were spent by different supervisors in conference work during the past year.

It is suggested by the survey staff that it will prove most profitable for the educational work of the State for members of the State Department:

1. To hold regularly scheduled conferences with groups of division superintendents, high school and elementary school principals, rural supervisors, and other classified educational groups. At such conferences there should be discussed and developed:

- a. Programs of supervision, including the objectives, agencies, procedures, methods of measuring progress, etc.
- b. Minimum State standards and requirements relating to the course of study, general and special.
- c. Programs of curriculum revision and construction within the supervisory unit.
- d. School building standards, including sanitation, safety requirements, school building code requirements, school equipment, supplies, etc.
- e. The improvement of instruction, including problems relating to directing the learning process, individual differences, retardation, motivation, selection and organization of subject matter, evaluation of pupil achievement, and related problems.
- f. Experimental and research projects within the supervisory unit and cooperative State experimental and research groups.
- g. Training of teachers before service and in service.
- h. Standards for evaluating the character of instruction.
- i. The development of character and citizenship training.
- j. Ways and means of creating a general public interest in the un-specialized problems of education.

2. To make public addresses interpreting and stimulating interest in education.

3. To make surveys to determine the number, size and location of public high schools.

4. To evaluate the work of the public schools and to make recommendations for their improvement.

5. To develop and establish standards for various types of public schools, and for the several special school departments.

6. To set up the essential core of the curriculum and certain general standards of progress for the various grades.

7. To encourage and promote better standards of professional preparation of teachers.
8. To carry on research and investigation to secure a fact basis for an ever-progressing program of education in Virginia.
9. To provide a school building code with annual revisions to meet newly-developed standards.
10. To encourage and promote the development of valid permanent reading interests of childhood and youth by developing school libraries and by recommending library book lists.
11. To regulate the sale of textbooks within the State.
12. To develop a State program of vocational and educational guidance.

In making these recommendations the survey staff are appreciative of the high level of ability and of the efficient work of the State Department of Education. Virginia is to be congratulated upon having so able a State Superintendent, and so well trained an educational staff in its State Department.

6. It is recommended that the staff of the school buildings division be decreased and that the policy of furnishing plans, specifications, and supervision of building construction now carried out by the State Department of Education be discontinued. In view of the great need for additional State direction in the field of rural and negro education, the survey staff believe that at least a portion of the funds now being used for the preparation of school plans may profitably be expended in providing more adequate State direction in these fields. It is recognized that the present building division is providing more adequate, more sanitary, better ventilated and better lighted school buildings than was possible before the creation of this division. The gains which have accrued through the work of this division may be continued by the development of a school building code with proper provision for its enforcement, thus doing away with the necessity of drawing plans and specifications in the offices of the division of school buildings. During the fiscal year ending June 30, 1927, out of a total expenditure of \$84,664.05 by the various divisions of the State Department of Education, \$22,357.43, or more than one-fourth of the total amount, was expended by the division of school buildings.

7. Since one of Virginia's outstanding educational needs is a more adequate development of the field of rural education, the survey staff recommend the addition of at least one full-time State supervisor to this division to assist in realizing the objectives set forth in Division I of this report.

8. The survey staff recommend the abolition of the school trustee electoral board. At the present time it has but two functions:

- a. To appoint one trustee from each magisterial district to the county school board. There is no reason to believe that this function cannot be performed by the qualified voters of the county. The present system of school organization gives the people but little voice in the fundamental matters of education. While public education is a function of the State, its direction should be in the hands of the people of the State.

- b. At present the school trustee electoral board hears appeals from action of the county board which it appoints. Such appeals may go directly to the Superintendent of Public Instruction or to the State Board of Education since this function is at the present time being performed by them in certain types of cases.

9. It is recommended that the county school board, to consist of five members, be elected at large, serially, by the qualified voters of the county for a term of five years.

10. It is recommended that the appeals by aggrieved citizens from the action of the county school board go directly to the State Board of Education.

11. It is recommended that the present system of subdividing cities into school districts be abolished; and that city school boards shall consist of five members elected at large, serially, for a term of five years by the qualified voters of the city.

12. The survey staff approve the transfer of power to appoint division superintendents from the State Board of Education to county and city boards of education.

13. It is recommended that, with the change in the method of selecting county and city school boards, such boards be granted the right to determine the tax levy for school purposes within the county and city, respectively, subject to a maximum tax limit for school purposes to be fixed by the General Assembly. Provision should be made for a referendum on any school tax levy made by the county or city school board which exceeds the maximum tax levy provided by the General Assembly.

14. The State Board of Education should scrutinize carefully the professional preparation and experience of all candidates for the position of division superintendent of schools. No candidate should be approved who has not completed at least four years of academic and professional preparation in a standard college or teacher-training institution, and who has not had, in addition, experience in the type of problems with which he must deal. Political considerations and local influence should not determine and dominate the selection of division superintendents of schools.

15. Provision should be made for adequate clerical service for division superintendents of schools in order to release their time for their important supervisory duties.

16. The State Board of Education should cooperate with the division superintendents of schools in the development of specific supervisory programs covering a period of years.

17. Teachers and principals should be consulted in the preparation of these supervisory programs. They should be discussed with teachers at the annual institute held in each division. In carrying out these supervisory programs, cooperation should be secured from rural supervisors, club leaders, public health nurses, school principals, teachers, agricultural agents, and all other educational agencies within the division. In the development of the supervisory program, activities like the following should be supervised:

- Classroom visitation.
- Conferences with teachers.
- Demonstration teaching.
- Group teachers' meetings.
- County institutes.
- Extension classes.
- Mimeographed bulletins.
- Testing programs.
- Diagnostic and remedial programs.

The purpose of the recommendations made above is to redirect the activities of the division superintendents from the field of legal, statistical, and clerical duties to the major field of administration of rural school supervision.

VIII. Pupil Population, Enrollment, and Attendance

The findings of the survey staff and discussion thereof, upon which the following recommendations are based, will be found in Division VIII of this Report. The survey staff recommend:

1. That for purposes of school census, school age be defined as five to eighteen, inclusive, and that school population be estimated on the basis of the number of children of those ages.

2. That school funds be apportioned on this basis rather than on the present basis of school population between the ages of seven and nineteen, inclusive.

3. That the State Constitution be amended by striking out the compulsory attendance provision of Section 7, and that the compulsory attendance law of 1923 be amended—

- a. So as to provide for the compulsory attendance of children who have reached the seventh birthday and have not passed the fifteenth birthday.
- b. So as to establish a minimum school term of 160 days.
- c. So as to provide for compulsory attendance throughout the year,
- d. So as to abolish exemption on the basis of the ability to read and write,
- e. So as to provide that exemption for physical or mental disability shall be granted by the county or city board.
- f. So as to provide that county school boards shall be encouraged to employ necessary attendance officers.
- g. So as to encourage each city board to employ necessary attendance officers.
- h. So as to necessitate the keeping of cumulative census records on the basis of both individual children and family groups of children.

4. That the State Department of Public Instruction shall revise the annual reports required of the county and city superintendents in keeping with the recommendations in 3, g and h, and in accordance with forms (five of them) found in Appendix II.

IX. Financial Accounting.

In order that both the local accounting systems and the statistics published by the State Department may conform to the practice of the United States Bureau of Education, it is recommended:

1. That the items for distributing receipts be modified to conform to the following divisions:

Receipts

(a) Revenue Receipts:

- 1. General appropriations from Federal, State, and county

(b) Specific Appropriations: Federal, State, and county:

- 2. High school, junior high school or graded school
- 3. Agriculture
- 4. Commercial department
- 5. Household arts
- 6. Industrial arts
- 7. Special children: Deaf, dumb, blind, crippled, etc.
- 8. Teachers' training and other special aid

(c) Local Revenue Receipts:

- 9. Local or district levy
- 10. Tuition for grades
- 11. Tuition for high school
- 12. Fees: Locker, semester, breakage, etc.
- 13. Net proceeds from rent or sale of textbooks, supplies, etc.
- 14. Income from property or funds
- 15. Total revenue receipts

Nonrevenue Receipts:

16. Proceeds from bond sales and loans—temporary, or from State funds
17. Sales of property and proceeds of insurance adjustments
18. Other nonrevenue receipts
19. Total nonrevenue receipts
20. Total receipts

2. That the division of advancement accounts be introduced in accordance with the following divisions:

Advancement Sheet:

1. Textbooks
2. General school supplies

Special Supplies:

3. Agriculture
4. Commercial
5. Fine arts
6. Household arts
7. Industrial arts
8. School lunches
9. Physical education (including athletics)

3. That bases for distributing expenditures shall be as follows:

- a. General control
- b. Instruction
- c. Operation
- d. Maintenance
- e. Fixed charges
- f. Debt service
- g. Coordinate activities
- h. Auxiliary agencies
- i. Capital outlay

4. As a means of incorporating and maintaining accounting practice in accordance with the above recommendations, it is advised that the State superintendent should provide for conferences between the city and county superintendents for a study of the accounting system. Also, the State department should maintain a consulting relationship to the local school systems in respect to accounting problems that arise.

X. Schoolroom Facilities

The survey staff recommend:

That Virginia begin at once to provide additional schoolroom facilities for the school population of the State, as shown in detail both for white and for negro pupils in Chapter LXI, Division X, of this report. It should be the aim to follow a building program which within ten years, at the longest, will provide adequate classroom space for all children of compulsory school age in the State. As rapidly as adequate facilities are provided for children of elementary school age, the State should provide adequate schoolroom facilities for pupils who desire a high-school education.

XI. Home Economics.

The survey staff recommend:

1. That home economics should not be left to incidental instruction in the higher grades of the elementary school, but that such instruction should constitute a definite part of the work in the social studies, the industrial arts, and health instruction.

2. That at least one year of work in home economics should be required of all girls in the last year of the elementary school. This work should include food values and the preparation of foods, and the sanitary management of the home and the environments.

3. That every public high school receiving State aid in Virginia should be required to offer at least one year of home economics, which should be elective for all girls in the high school. Courses of study should be so arranged that every girl should be permitted to elect at least one year of home economics.

4. Vocational home economics should be extended as rapidly as funds can be provided for the maintenance of this work. The survey staff have learned that many schools are requesting that funds be provided so that they can offer vocational home economics. The State should endeavor to comply with the request of every high school for aid.

5. In the teaching of home economics the aim should be to connect the work in school very intimately with the work in the home. Home projects should constitute an important part of the work in home economics in the schools. The programs of home economics teachers should be so arranged that they can become familiar with the situations in the homes of the communities in which they teach.

6. Home economics teachers should aim to supplement their preparatory work by experiences in a home, so that they will be skillful in the practice as well as versed in the theory of home making.

XII. Vocational Agriculture in High Schools

The survey staff recommend:

1. That rural communities should continue to pay one-third of the cost of instruction and equipment in vocational agricultural courses, just as is being done at present.

2. The State should, as rapidly as possible, extend the work in vocational agriculture by supplying the necessary funds, to the end that every farm boy in the State may have an opportunity to study modern agricultural science and methods, if he is desirous of doing so.

3. The General Assembly should continue the present appropriation and equipment for vocational agriculture and should match Federal funds dollar for dollar. The survey staff recommend that Smith-Hughes funds be matched by State funds, in order that departments of vocational agriculture as well as of home economics and trades and industries may be introduced into high schools that are desirous of providing for them.

XIII. Trade and Industrial Education.

The survey staff recommend:

1. That the State of Virginia increase its State appropriation for the maintenance of trade and industrial education to equal at least the subsidy derived from the Federal government under the provisions of the Smith-Hughes Vocational Act.

2. That boards of education, especially in the cities of the State, set up day-unit trade and industrial classes for the training of children who do not intend to enter college.

3. That boards of education set up part-time trade preparatory and part-time general continuation classes for the education of employed children, and that employers be encouraged to send their juvenile employees to these classes.

4. That boards of education set up evening schools for the vocational training of adult workers.

5. That in cities of 35,000 inhabitants or over, the school board employ a local director of vocational education, whose responsibilities shall include the promotion and organization of all forms of vocational education, and the allied forms of special education, such as manual training, industrial arts, and home economics.

6. That the appropriation to the State Department for vocational education for administration and supervision be increased sufficiently so that the supervisory force may be adequately compensated.

7. That Virginia establish a State vocational school, available to high school graduates from all sections of the State, and to include in the course of study the teaching of the building and machine trades, paper, textile and furniture manufacture, and commercial subject, such as bookkeeping, stenography, typewriting, and accountancy.

XIV. Extension of Library Facilities.

The survey staff recommend:

1. That the State should immediately begin a program of extension of library facilities, particularly for the rural population. The county unit plan in the development of libraries for rural sections, as presented in detail in Chapter LXIX, should be followed in Virginia.

2. The State should contribute to the extension of library facilities in any community only on condition that such facilities shall be made easily and readily available for use by pupils in the public schools. Libraries should be regarded as adjuncts to the public schools, but all their facilities should be available for youths and for adults who are not enrolled in the schools.

3. Libraries to which the State makes any contribution for buildings, equipment, or maintenance should be placed under the administrative control of the State Department of Public Instruction.

4. A supervisor of public school libraries should be placed in the State Department of Education for the purpose of supervising libraries in public schools, with a view to making them serviceable to pupils in the schools and also to citizens in the communities in which the libraries are situated.

5. There should be in every public school in which there is a library at least one teacher who has had courses in library methods, and this teacher should be charged with the responsibility of managing the school library. She should make a report annually to the supervisor of school libraries in the State Department of Education. The teacher in charge of the library should not be burdened with a teaching program which would make it impossible for her to manage the school library in an effective way.

6. It should be the aim to provide in every school building a well lighted, well ventilated library room with an equipment which will facilitate the use of books by pupils and also by the people of the community so far as this may be practicable.

7. The minimum number of school library books should be 500, in addition to a minimum list of reference and standard works. A high school should not be placed on the State accredited list until these minimum library facilities are provided. The State Supervisor of Libraries should approve the library facilities of a high school before the school is placed on the accredited list. No school should be accredited which does not provide at least a part-time librarian for the management of the library.

8. The State should encourage the establishment of county libraries by extending State aid in the sum of \$1,000 to \$5,000 to every county that will organize and maintain a county library. State aid should be used for the purpose of purchasing books and not for the erection of buildings or providing equipment. The books bought by any library should be from lists approved by the State Supervisor of Libraries.

9. The Library Extension Department of the State Library and the School Library Division of the State Department of Education should be merged and control lodged in the State Department of Education.

10. The State should appropriate for the purchase of books for libraries of the State \$55,000 the first year, \$45,000 the second year, and such amounts

thereafter as may appear to be necessary in order to promote the organization and maintenance of libraries.

XV. Supplementary Educational Agencies.

1. The Cooperative Education Association of Virginia should be regarded as a supplementary educational agency and should receive aid from the State to the extent of \$5,000 a year. Inasmuch as the State contributes to the maintenance of this association, its administrative guidance should be placed in the State Department of Education to the end that the funds contributed by the State may be used solely for the promotion of educational work. The State Superintendent of Public Instruction should be given authority to prevent harmful rivalry between the Cooperative Association and the Virginia Congress of Parents and Teachers.
2. The Virginia Congress of Parents and Teachers should be regarded as a supplementary educational agency and should receive State support in the amount of \$4,000 a year. Inasmuch as the State contributes to the maintenance of the congress, administrative guidance should be placed in the office of the State Department of Education, to the end that State funds may be used solely for the betterment of educational work in the State. The State Superintendent of Public Instruction should be given authority to prevent harmful rivalry between the Virginia Congress of Parents and Teachers and the Cooperative Association.
3. If the State Superintendent of Public Instruction finds at any time that either the Cooperative Education Association or the Congress of Parents and Teachers is engaging in rivalry or competition harmful to the educational interests of the communities in which they are operating, State support should be withdrawn from either organization or both of them. State aid should be continued only so long as each organization continues to be a supplementary educational agency of positive educational benefit to the State, and does not endeavor by word or deed to injure other educational agencies.

DIVISION I

Rural Elementary Education For White Pupils

CHAPTER IV

THE IMPORTANCE OF RURAL EDUCATION IN VIRGINIA

Rural vs. Urban Districts

Of the one hundred and forty local school units in Virginia, twenty-four are city districts, eighty-eight are rural districts, and twenty-eight (known as "separate districts") may be called semi-rural. In the eighty-eight rural districts there are one hundred counties. In seventy-seven cases the district (known as a "division") is a single county; in ten cases it is composed of two counties; and in one case of three counties. The separate district is a town of five hundred or more population that has voted to become separate from the county school organization. It has its own board of trustees which exercises general control, including the determination of the school budget over and above the county levy; but the division superintendent of the county or group of counties in which this separate district is located is the superintendent.

The eighty-eight rural divisions and the twenty-eight separate districts in 1926-27 maintained 12,764 school rooms as compared with 3,656 rooms in the twenty-four city divisions. In these rural areas, 12,815 teachers taught 416,234 pupils as compared with 4,236 teachers with 133,083 pupils in the city districts. It is thus seen that the rural divisions of Virginia had over three times the number of teachers and pupils that the city districts had.

Virginia Has Made Progress in Rural Education

From certain sources, largely the reports of the State Superintendent of Public Instruction, it has been possible to secure data on certain important factors of the school system that permit of comparisons between the school years 1918-19 and 1926-27. During these nine years the average length of the school term increased from 147 to 168 days. The number of one-room schools decreased from 2,524 to 1,994. The average salary of teachers increased from \$348.76 to \$635, and the percentage of pupils in attendance from 67.3 to 86. The percentage of teachers holding the lower grade certificate, i. e., elementary or below, decreased from 85.4 to 62.2. While 15.4 per cent of all school rooms in the county were not visited by the superintendent in 1918-19, only 6.8 per cent were not visited in 1926-27. In the former year, 33.8 per cent, and in the latter year, 26.5 per cent were visited by the superintendent only once.

	1918-19	1926-27
Average length of term.....	147 days	168 days
Number of one-room schools.....	2,524	1,994
Average salary of white teachers.....	\$348.76 ¹	\$635.00
Percentage of attendance.....	67.3 ²	86.0
Percentage holding elementary certificate or less	85.4	62.2
Percentage of schools not visited by superintendent	15.4	6.8
Percentage of schools visited only once....	33.8	26.5

¹From Survey and Report, Virginia Public Schools, 1919, p. 338. This figure is the median and is for the year 1917-18.

²Ibid., p. 297.

Other data for 1918-19 are from the State Superintendent's Report for 1918-19, pp. 79, 80, 81, 84.

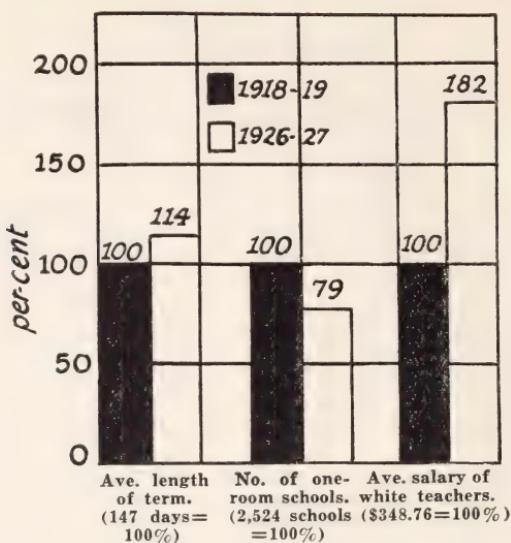


Figure 1.—Percentage increase in average length of term, number of one-room schools, and average salary of white teachers, 1918-19 to 1926-27, or comparison of school facilities in 1918-19 and 1926-27.

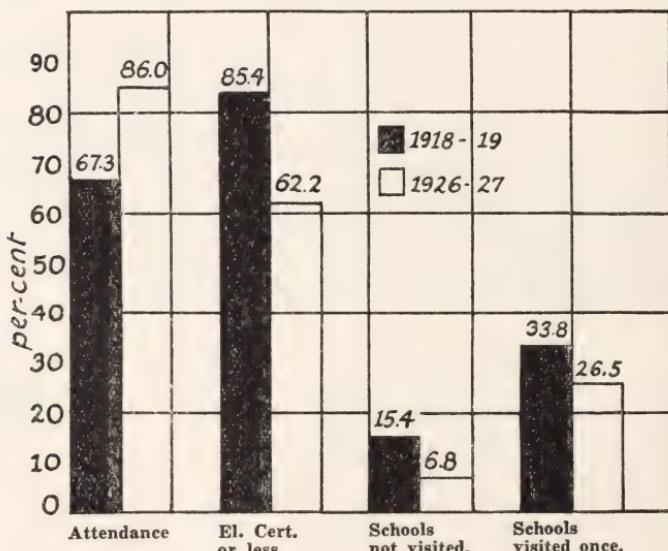


Figure 2.—Percentage in attendance, holding elementary certificate or less, of schools not visited by superintendent, and of schools visited only once in 1918-19 and in 1926-27.

School Facilities in Rural and Urban Areas Compared for the Year 1926-27

While the rural schools made progress so also did the city schools. The accompanying data show that in most factors the city schools were ahead—in some factors considerably ahead. The rural schools had an average length of term of one hundred and sixty-eight days while the city schools had one hundred and eighty-one days. This means that each year the rural child, even if he made full use of the facilities provided, would have thirteen days less schooling. In the seven years of the school course, this would be a loss of ninety-

	Rural ¹ 168 days	City ¹ 181 days
Average length school term.....	168 days	181 days
Percentage in attendance.....	86.0	93.0
Percentage holding elementary certificate or less	62.2	19.1
Percentage elementary teachers with less than one year experience.....	11.9	5.2
Percentage elementary teachers new to the division	22.6	14.6
Percentage of schoolrooms not visited by superintendent	6.8	0
Percentage of schoolrooms visited by su- perintendent only once.....	26.5	29.0
Average number of elementary pupils per teacher	38	47
Average salary of elementary teachers.....	\$635.00	\$1,104.00 ²
Average per capita cost of instruction in elementary schools	\$20.63 ²	\$32.00 ²

one days or about four and one-half months. That the situation is much worse than this for many rural children, because many schools fall considerably below the average of a 168-day term, may be seen from other data given in Division VIII of this report.

Whether from lack of will, greater difficulty in getting to school, or other reasons, only eighty-six per cent of rural children were in average attendance in 1926-27 as compared with ninety-three per cent of city children. Detailed data bearing on this matter are presented in Division VIII. Of the rural teachers, 62.2 per cent held an elementary professional certificate (approximately equivalent to one year of training above the eleven grades of the regular school system) or less, compared with only 19.1 per cent in city schools. Eleven and nine-tenths per cent of the rural teachers had less than one year of teaching experience while 22.6 per cent were new to the division in which they were teaching, as compared to 5.2 per cent of city teachers with less than one year of experience and 14.6 per cent who were new to the division. In the rural areas, 6.8 per cent of the school rooms were not visited by the superintendent in 1926-27, while all rooms in the cities were visited. However, the city schools had a slightly larger percentage of rooms visited by the superintendent only once, the figures being 29.0 per cent for the cities and 26.5 per cent for the rural schools. City schools also had a larger average number of elementary pupils per teacher—forty-seven—as compared with thirty-eight in the rural schools.

The average salary for elementary white teachers in 1925-26 was \$622.00 in the rural sections and \$1,104.00 in the cities. While it is true that the cost of living is greater in the city than in the country, so that the city teacher does not have quite so great advantage in salary as the figures would indicate, it is also

¹Data from State Superintendent's Report for 1926-1927 and furnished by the State Department in advance of publication.

²Data for 1925-26.

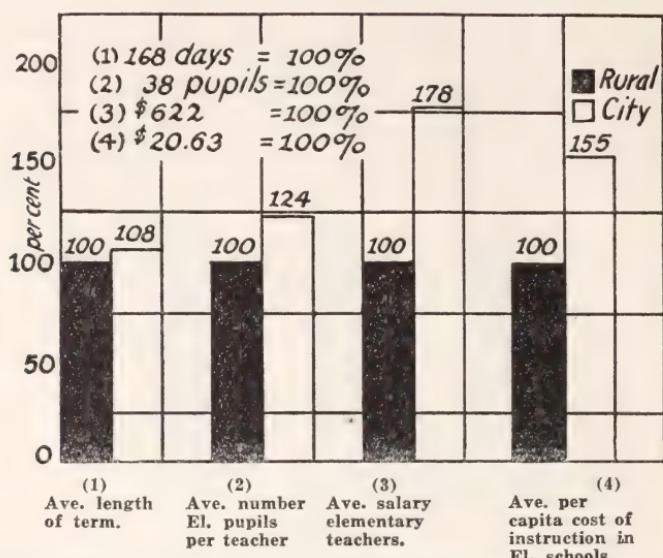


Figure 3.—Comparison of school facilities in rural and city schools (1926-27).

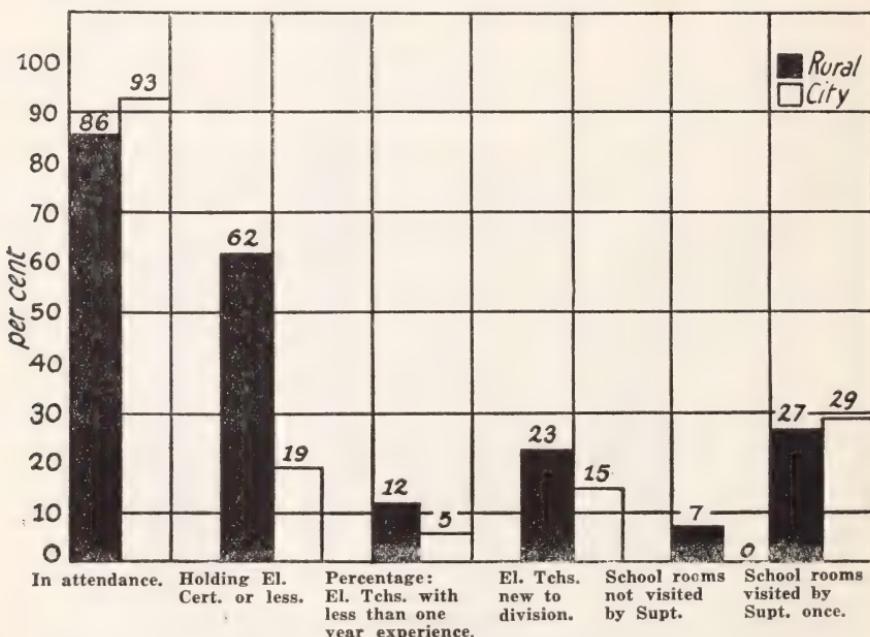


Figure 4.—Comparison of school facilities in rural and city schools (1926-27), continued.

true that the rural teacher, particularly in the open country, has, usually, less satisfactory living conditions and fewer social opportunities. The counties expended in 1925-26 only \$20.63 per capita for instruction in elementary schools compared with \$32.00 expended in the cities.

Virginia, like other southern States, is somewhat handicapped because of the necessity of maintaining a dual school system for the white and the negro races, this greatly increases the educational burden upon a State that does not at present possess the wealth in proportion to need that some of the more fortunate States have. But if Virginia is to retain her honored and historic place among the States of the Union, her oncoming citizens, whether living in the country or in the city, must have advantages equal to those offered elsewhere. It should be mentioned here that, as shown in detail in Division IX of this report, Virginia is not making as great effort in the support of education as are States that are showing considerable material and social prosperity.

CHAPTER V

SOCIAL FACTORS IN VIRGINIA RURAL LIFE AS THEY RELATE TO THE SCHOOLS

What are the prevailing conditions in Virginia rural life which citizens should take into account in judging how well the educational system is discharging its obligation to prepare the rural population for meeting life's demands in Virginia? What are the conditions and influences which tend to prevent the schools from properly performing the tasks which society has assigned them? These are the questions to which this chapter will be devoted. The discussion will be based on the view that the efficiency of an educational system should be judged not only by the standard of school management, supervision, financial support, and so on; but also by the final results, or end products, of the educational process.

Since many of those responsible for prevailing conditions have not had the full benefit of the many school improvements of the last decade, and since there are a number of influences tending to keep the schools from operating with full efficiency, it would not be fair to the schools to hold them alone responsible for all social shortcomings. Moreover, part of the responsibility lies with other institutions. Careful analysis of the situation, however, leads to the conclusion that in a democracy all things wait on education,—the best agricultural practices, effectively directed labor, an efficient marketing system, the best home life, good health conditions, good churches, constructive leadership, intelligent citizenship, efficient government, social justice, successful organizations, and good community life. A review of prevailing conditions in these important spheres of activity should give at least some index of the efficiency of the educational system. Space limits do not permit a consideration of all the phases of social well-being that have been mentioned. We will therefore confine the analysis here to the first ones listed. The inter-relationships between agricultural conditions and practices and educational work and policies is a problem having many angles, and this discussion must be limited to a few of the most important, such as: (1) income and standards of living; (2) causes of low income and standards of living; and (3) educational implications.

Farmers' Income and Living Standards

The majority of Virginia farmers do not have a sufficient income to maintain a satisfactory living standard. The truth of this statement is supported by several lines of evidence. For example, the National Bureau of Economic Research in its study of "Income in Various States—Its Sources and Distribution" in 1921 found that the net income of the Virginia farm population was only \$594 per family, as compared to a net income for the nonfarm population during the same year of \$2,376 per family. This report also informs us that when the 1921 per capita income of the Virginia farm population is compared with the per capita income of the farm population of other States, Virginia farmers rank forty-fourth, while in a similar comparison of nonfarm groups the Virginia nonfarm population ranks forty-first.

The Virginia farm situation has improved somewhat but not greatly since 1921. The statistical division of the State Department of Agriculture reports that the gross income of Virginia farmers for the four-year period from 1923-26 was approximately as follows: 1923—\$1,017; 1924—\$869; 1925—\$877; and 1926—\$1,005. Interviews with many merchants, bankers, and farm loan association officials in all sections of the State indicate that a majority of farmers have had to call on the banks very heavily for assistance during this period. Interest on loans, together with taxes and operating expenses, seeds, feeds, fertilizers, machinery, labor, fencing, and repairs undoubtedly cut the above income figures in half. Hence, the net

amount left for living expenses, education, doctors' bills, recreation, contributions to churches, and so on, still falls below a fair standard—it is far too low in most cases to give rural young people the advantages necessary for the full development of their potentialities; and too low for the adequate support of the institutions contributing to the cultural part of living standards. These figures are confirmed by farm management surveys made in several sections of the State.

The fact that Virginia farmers have a relatively low income is still further shown by their low wealth accumulation. In more than half of the counties of the State, the average value of the farms in 1924 was less than \$5,000, and approximately one-third of this was covered by mortgage debts. Also, according to the latest available figures, the estimated average per capita wealth of the Virginia farm population was only approximately \$1,124 as compared to an estimated average of approximately \$3,158 per capita for the residents of Virginia towns and cities.

Many consequences of far reaching social significance result from the economic situation indicated by the figures just given. Two of the most important are (1) the tendency to excessive urban migration, and, (2) the inability of the people to take full advantage of the best farm home and marketing practices.

Excessive urban migration, if it is of a selective character, as the evidence indicates it to be, tends toward the deterioration of the quality of the rural population, the depletion of rural leadership, the retardation of wealth accumulation; and it makes the upkeep of all local organizations and institutions more difficult. The urban population of Virginia increased 41.4 per cent from 1910 to 1920 as compared to a rural increase of 3.2 per cent,—thirteen times as much. The net loss in the rural population from 1920 to 1925 was approximately 63,000. Furthermore, by classifying the people into age groups, we find that the Virginia country districts have in proportion to their population 12.8 per cent, or one-eighth more children under twenty years of age to support and educate than do the cities of the State; in the cities as compared with the rural sections 12.4 per cent more of the population are between the ages of twenty-two and forty-five, the most productive years. The situation helps to explain the tendency for wealth to concentrate in the cities. It may be remarked in passing that in view of such conditions, and the relatively heavier educational and tax burdens which are borne by the farming community it is only just for the cities to pay a larger portion of the taxes needed to maintain the country schools than they have been doing heretofore.

With such low incomes, it is extremely difficult for rural people to take advantage of the best farm, home, and marketing facilities and practices. According to the latest available information, only one farm home in twenty has running water in the house and only one in twenty-five has acetylene or electric lights. A large percentage of the farms, too, are inadequately equipped with the best labor-saving machinery. The lack of labor-saving conveniences leads to overwork and fatigue on the farm which in turn makes it impossible for farm people properly to inform themselves regarding the best methods of farm and household management and promoting community welfare, and desirable educational policies. Above all, when parents on farms are overworked and fatigued, they cannot give proper attention to the training of their children, especially training designed to prepare them for social activities in later life. Furthermore, when farmers are near the lowest economic margin, it makes them afraid to adopt untried agricultural practices and marketing methods. The whole situation tends to result in increased costs, lowered prices, lowered efficiency, overworked parents, child labor, drudgery, dissatisfied young people; and so on around a vicious circle.

Causes of Low Farm Income and Living Standards

Among the many causes for the situation just outlined, the two for which the educational system has the largest share of responsibility are (1) inefficiency in agricultural practices and (2) insufficient group cooperation.

Although under the leadership of the Virginia Polytechnic Institute and other agencies there has been commendable improvement along many lines—more intelligent treatment of the soil, increased use of purebred seed, improvement in the quality of live stock, better business practices, and increased production along many lines so that the State is self-sustaining in most food products—the fact remains that there is still inefficiency in farm management and cultivation. There is evidence to indicate that Virginia agriculture, taken as a whole, is not more than fifty per cent efficient. There is little or no profit to be had when the yield of the leading crops is as low as the State averages for the 1921-26 five-year period—only twenty-five bushels per acre for corn, 12.9 bushels for wheat, 21.5 bushels for oats, 1.07 tons for hay, and 664 pounds for tobacco. The average annual production of Virginia cows at the time of the 1925 census was reported as only 339 gallons of milk, as compared to 556 gallons for each Wisconsin cow. At that time the cows of thirty-five other States showed a better production record than did the Virginia cows. We find, furthermore, that at the same time the estimated average annual production of Virginia hens was only fifty-two eggs. At the 1920 census period, only 4.7 per cent of the Virginia farmers reported purebred stock of any kind other than poultry. At that time only 2.7 per cent of the dairy cows were purebred, only 1.1 per cent of the sheep, and 2.2 per cent of the hogs. There are no available figures as to the per cent of farmers using purebred seed, but such information as the survey staff has been able to secure indicates that it is quite small.

A recent survey of the situation shows that the farmers of the State are not using more than one-thirtieth of the lime which they could use with profit, even though experiments show that each ton of lime used gives on the average an annual profit of ten dollars. We are told, furthermore, that much of the 342,386 tons of fertilizer annually used is wasted.

In contrast to these figures, the survey staff find the situation more encouraging in respect to those making use of modern scientific methods. For instance, the average annual production of the 10,000 cows represented in the nineteen cow testing associations of the State is 6,856 pounds of milk, or more than twice the general average. The demonstrators working with the county agents on 10,604 acres of corn secured an average increase in yield of eight bushels per acre. Again, the 8,056 boys growing an acre of corn in the corn club work from 1911-24 secured an average yield of 53.8 bushels per acre, or practically double the State average; and the boys in vocational agricultural classes in fifty-nine counties averaged approximately \$16 more profit per acre with 2,400 acres of corn, than the farmers of these counties obtained.

Lack of group cooperation is another important factor responsible for low farm incomes. Generally speaking, farmers get the best results through cooperative selling. Yet the amount of cooperative sales of Virginia farm products amounts to only about eleven per cent of the total; and probably not over one per cent of the Virginia farmers' supplies are bought cooperatively. Approximately one farmer in eight buys or sells cooperatively. Less than one in twenty belongs to a general type farmers' organization. The more strictly educational organizations, like the Cooperative Educational Association and the Parent-Teachers Association, enroll about the same percentage of the Virginia rural population.

CHAPTER VI

THE QUALITY OF TEACHING IN RURAL SCHOOLS

How the Teaching Was Studied

The method of controlled observation was employed. Realizing that the time available for this particular phase of the survey was limited, the survey staff first agreed upon the important factors in good teaching that should be studied. These were then organized as shown in the accompanying form.

1. Teacher_____
2. No. teachers—2
3. Subject and grade observed—*Fourth Arithmetic.*
4. Specific problem or topic of recitation—
Problems in Multiplication.
5. Length of observation—20.
6. County_____

	1	2	3	4	5
A. Personality.....			V		
B. Teaching Ability.....					
1. Motivation.....				V	
2. Pupil activity.....			V		
3. Vital material.....			V		
4. Wise emphasis of topic or elements of it.....			V		
5. Effective drill where needed.....				V	
6. Organization.....					V
7. Attention to individual needs.....				V	
C. Disciplinary Ability.....		V			
D. Attention to seat work and study.....		V			
E. General Rating.....			V		

F. Supplementary Activities:

Junior League.

Directed Play.

Singing Contests with Other Schools.

Reading, Spelling and Arithmetic Contests with Other Schools.

G. Certificate—First Grade.

H. Experience—Seventeen Years.

Certain characteristics of a good teacher, such as her influence in the community, it was not possible for the staff to pass judgment upon. Obviously, then, these are not included in this evaluation, and the reader should keep such limitations in mind. Attention should, perhaps, be directed to the fact that this method of investigation gives a measure of the *teaching process* rather than the *actual development that has taken place in the pupil* as a result of that process. It is assumed that a teacher who has a good teaching personality or who creates a desire on the part of the pupils to learn will get better results in pupil-development than will a teacher who is lacking in these qualities and powers. This method is suitable for field rather than for laboratory investigation. It is the type of investigation that the progressive supervisor or superintendent will ordinarily use in passing judgment upon teachers.

A total of one hundred and three elementary teachers was observed in one hundred and ten recitations. Every effort was made to see teachers in typical situations. Seven counties,* representative of the various sections of Virginia, were visited. All selections of schools were made by the observer, not by the superintendent. The general procedure was to start out from the superintendent's office on a circular trip, taking each school on the road regardless of size. At the larger schools where it was not possible to visit all teachers, the observer again made his own selection. As a result, fifteen observations were made in one-teacher schools; eleven in schools of two teachers; fifty-three, of three to five teachers; twenty-nine, of six to ten teachers; and two, of eleven or more teachers. All teachers observed were in the elementary grades only. Some times there were high school departments in a school. A fairly good distribution of visits among the seven elementary grades was made. The smallest number of observations was twelve in the second grade and the largest was nineteen in the fourth and in the seventh grades. Twenty-five observations were made in arithmetic; forty-two in reading; nine each in spelling, geography and history; eleven in language and literature; three in hygiene; and two in penmanship. In general, the superintendents believed that representative conditions and teachers were seen. An effort was made to observe each teacher for one complete unit of instruction—that is, from the beginning of a recitation to its end; and in practically all cases this was done. The period of observation naturally varied according to the subject, grade, and number of classes taught by a teacher; but the most commonly observed period was one of fifteen or twenty minutes. Some were as short as ten minutes and a few as long as thirty-five. All observations were made by one and the same person.

In the particular case illustrated in the form above, the name of the teacher and of the county are, for obvious reasons, withheld. The figures "1" to "5" at the right represent different degrees to which a particular factor was judged to be present in the teaching during the recitation observed. The figure "1" represents a very superior teacher,—one who exhibited the particular teaching factor as well as it is likely to be exhibited by any teacher. The figure "5" represents the other extreme,—one who did the work as poorly as it is likely ever to be done. The "average" teacher is represented by "3"; while "2" and "4" represent intermediate degrees of ability. While this particular teacher is given a general rating of "3", or "average," it should be observed that different abilities are judged to be present in varying degrees. This case shows, perhaps, somewhat greater variation among the different factors than is true of most of the teachers. Attention should, however, be called to the fact that a teacher may possess an effective teaching personality, say, to a high degree, but fail noticeably in meeting the needs of individual pupils or in attending to seat work and study.

The Results

The general ratings were distributed as follows:

	1	2	3	4	5	Total
County 1	1	9	11	5	1	27
County 2	1	3	3	1	0	8
County 3	0	2	4	3	0	9
County 4	0	2	3	8	2	15
County 5	1	3	5	3	4	16
County 6	0	1	10	8	2	21
County 7	0	1	8	5	0	14
Total	3	21	44	33	9	110
Percentage	2.7	19.1	40.0	33.0	8.7	

*The counties included were Albemarle, Orange, Isle of Wight, Norfolk, Smyth, Rockingham, and Rockbridge.

Three teachers did such superior teaching that the observer felt a thrill of pride in his profession. There comes to mind, for example, a first-grade teacher in an eight-teacher school, who was, at the time observed, teaching the children to count and to recognize numbers. Not only did she have a vivid, attractive personality but she made the children feel that this particular lesson was one of the most important things in the world. Through judicious work in concert she gave all members an opportunity to count and to recognize numbers; by means of a variety of devices, she tested and drilled several individuals, and corrected such errors as were made. All this was done with a class altogether too large—fifty-six. Another such skillful teacher was found in a one-room school; and the third was teaching history to a seventh grade class in a six-teacher school.

In contrast to these superior teachers there may be mentioned a teacher in a two-room school conducting a class in beginning penmanship. The particular problem was to drill the children in correct habits of position by means of a series of continuous circles. It is a device very commonly employed. Throughout the period the teacher counted for rhythm, and at the same time demonstrated on the board what should be done. She gave no attention to what the children themselves were doing; several did nothing; one was creating a disturbance; over half were using movements quite different from what was expected. No attention was paid to these errors except for one brief moment, and the period closed with most of the children having been drilled in *undesirable* habits.

Outstanding Weaknesses in the Teaching Observed

In five of the factors observed, weaknesses were found so frequently as to warrant particular attention. First, there was too little well-directed effort in motivating work. Pupils were assigned certain pages in geography or history or certain problems in arithmetic without their seeing the value of these materials to them. As a result, there was often lacking a mental alertness in the recitation that is so important for effective learning. Second, teachers often appeared not to understand the psychology of habit formation. To ask a child to repeat once only a misspelled word is not likely to give him control over it. It should be repeated until the association is established, and from time to time he should be tested and, if necessary, drilled further. Third, the difficulties of individual children were often ignored. If a class is given a dictated column of three-place numbers to add, one pupil may have difficulty in writing down the numbers correctly; another in adding the numbers in the first column; another in "carrying" to the next column. Mass instruction is not enough in teaching children; each should have help in his particular difficulty. Fourth, perhaps the most commonly found weakness was in the failure of teachers to give attention to the seat work of the class or classes not reciting. Wisely directed attention here may prevent the development of habits of idleness or of improper methods of work. Fifth, in the upper grades especially it was evident that teachers did not have sufficient control of the subject matter. This was shown not only in errors made but also in the closeness with which teachers followed, through the text, the recitations being made and in the formalism with which the class exercises were carried on.

Some Factors in the Situation

Table 1 presents data regarding the certificates held by Virginia white teachers in 1926-27. Only 26.3 per cent of all in the counties held a certificate that represents two years or more training above high school graduation. In the cities of Virginia, 63.6 per cent had such training. If we assume what is probably not the case, that all holders of the special certificate had two years of collegiate training, the percentages are raised to 37.8 for the counties

and 81.0 for the cities. In other words it is reasonably certain that not over one-third of the elementary teachers in the counties of Virginia have had two years or more of training above the completion of the eleven grades of the common school system.

The State Board of Education has made a ruling that by 1931 the elementary certificate, representing at least one year of professional training above the high school, shall be the minimum legal certificate. The board is to be commended for taking this step toward a higher standard of professional training. It should be pointed out, however, that this is but a step toward the generally accepted standard of graduation from a two-year normal school course, and the survey staff recommend that as rapidly as possible the standards be gradually raised until this desirable minimum of training for elementary teachers is reached.

Experience

Since so many of our elementary teachers in the United States are women many of whom will not continue permanently in the teaching profession, we may expect the experience of a large proportion of them to be somewhat limited. Data in Table 2 show, however, that in 1926-27 the counties had a much larger percentage of those with little experience than had the cities. In the counties, 11.9 per cent had less than one year of experience as compared with 5.2 per cent in the cities; 11.9 per cent in the counties had less than two years of experience as compared with 7.6 per cent in the cities; and 11.8 per cent in the counties had less than three years experience as compared with 8.2 per cent in the cities. In the counties over one-third of all the teachers—35.6 per cent—had less than three years experience as compared with about one-fifth, 21.0 per cent, in the cities.

In the counties, 22.7 per cent of all elementary white teachers were in 1926-27 teaching in the division for the first time as compared with 14.7 per cent in the cities.

It is obvious that the inexperienced teacher is not, other conditions being equal, as likely to do high grade teaching as is one who has had some experience. It is generally true, also, that a teacher new to a particular situation cannot do so well as she can after she becomes acquainted with the problems peculiar to her school. It is desirable, therefore, that every effort be used toward encouraging the good teacher to stay in the profession, and in one and the same position for a reasonable period. Data secured in 1922-23 show that in Virginia nineteen per cent of all teachers in the State were replaced as compared with sixteen per cent for the entire country.*

Among the means that may be effective in reducing this teacher-turnover are: Increased pay for continuance of a good teacher in the same position; better working conditions; expressions of appreciation by members of the community and the teacher's superior officers; providing attractive living conditions in the better homes of the community; and making the teacher feel that she has a part in the life of the community.

Teaching Equipment

The teaching equipment is often very meager, there being in some cases not even the barest essentials. For example, in twelve schools of one to four teachers in one county (which was certainly not one of the worst counties in this particular that the observer visited), eight had no clock; seven, no thermometer; two, no United States flag; four, no playground equipment; twelve, no geometrical figures; four, no number pegs; two, no number cards; two, no arithmetic drill books; two, no maps; five, no State map; six, no county map; ten, no language construction work; seven, no teacher's library aids; one, no flash cards; two, no dictionary. Such deficiencies should, of course, be remedied as quickly as possible.

*Research Bulletin of the National Education Association, Vol. II, No. 5, p. 144.

The Home Teacher

While a good teacher should not be discriminated against merely because her parents live in the district or county, there is danger in selecting too many of these so-called "home teachers." In the first place, it is desirable for the teacher herself to gain experience under other conditions than those with which she was familiar as a pupil; new contacts and new situations are generally stimulating and broadening so that her usefulness as a teacher is likely to be increased. In the second place, it is stimulating for a school to have a large percentage, at least, of teachers who have been trained or who have had considerable experience elsewhere. In the third place, there is danger that the "home teacher" may come to depend, in holding her position or securing a salary increase, upon the influence of her family and friends rather than upon her own efficiency. When such factors play an important part in teacher retention and promotion, the whole system may become demoralized. A school cannot be effective except as professional efficiency is made the criterion for selecting and retaining members of the staff.

Conditions regarding the "home teacher" in the fall of 1927 vary markedly among the counties. Three counties report no teachers now employed (see Table 3) who received two years or more of their secondary school training in a high school in the county. One county reports 98.0 per cent of such teachers. Forty-one of the one hundred counties report fifty per cent or more of such teachers. The range of the middle fifty per cent is from thirty-four per cent to 67.5 per cent. The median percentage of unmarried teachers whose home is in the county in which they teach is 53.5 per cent. The range is from 0.0 per cent to 71.6 per cent. Fifty of the counties have fifty per cent or more of teachers of this kind. The median percentage of unmarried teachers teaching in the district in which their homes are located is 30.7 per cent. Three counties have none in this situation, while one has 86.0 per cent. Eighteen counties have fifty per cent or more of such teachers. These data indicate that, on the whole, Virginia counties have a larger number of teachers of this type than is desirable.

Is Virginia Getting the Worth of Her Money in Rural Teaching?

It appears, from criticisms of the school system that have come to the survey staff, that some citizens believe the State is not getting adequate returns for the money expended on the schools. While data relating to this matter are presented in great detail in Division IX of this report, still it may be said here that when teachers are so poor as to be rated "5" on the scale described in the first part of this chapter, it is, in the judgment of the survey staff, safe to say that they are being paid more than they are worth, no matter how little they are paid. It is poor economy for the State to keep them in such vital positions. Speaking generally, however, the survey staff believe that not only are the teachers giving good returns for the money they receive, but that the State is fortunate in securing so much good service for what it pays in salaries.

As evidence of this, compare the salaries of Virginia teachers with those throughout the country. An investigation made by the National Education Association* in 1926-27 showed that the median salary paid teachers in one-teacher schools was \$755; in two-teacher schools, \$763; in schools of three teachers or more, \$874; in consolidated schools, \$1,066. The average salary paid white elementary teachers in the counties of Virginia in 1926-27 was \$635. Thus the Virginia teacher in the rural elementary school received from \$120 to \$431 less than the median salary in rural schools throughout the country. In the same year the rural elementary white teacher in Virginia received \$635 as compared with \$1,104 received by the elementary teacher in the city schools of the State.

*Research Bulletin of the National Education Association, Vol. V, No. 3, p. 143.

The survey staff believe that it would be good economy for the State to pay higher salaries to its rural teachers. If this were done, the less efficient among the teaching staff could be eliminated. This would encourage those who remain in the schools to exert themselves in order that they may retain their positions.

Over-Age Children

The observer was impressed with the number of pupils who were clearly much older than children should ordinarily be for the grade in which they were located. Data presented in Division VIII of this report regarding the extent of over-ageness in Virginia bear out these observations. Over-ageness calls for the serious attention of school people. To have in the same class persons who range in age from eight to fifteen means that the difficulties of teaching are greatly increased. An effort should be made by any school to discover the causes of over-ageness in every case; failure to begin school at the normal age of six or seven; irregularity in attendance from any cause; poor teaching; lack of a wisely planned curriculum; inferior ability of the pupil; and the like.

The observer was impressed with the number of over-age pupils who appeared to be below normal ability. The county superintendent in each county was asked to estimate the number of white children of legal school age in the county "so deficient mentally that they cannot be properly cared for in the regular school." Sixteen superintendents reported that there were none; four reported "few"; while fourteen reported one hundred or more each. The highest number reported was three hundred. The sixty superintendents who reported some such cases and gave estimates in definite numbers reported a total of 3,456. It is evident that low mentality is an important factor in over-ageness in Virginia.

The survey staff suggest that the State Department of Education should conduct a thoroughgoing study of over-ageness in rural schools in a typical county. Such a study should reveal not only the extent of over-ageness but should give consideration to the question of what remedial measures are, under existing conditions, desirable and feasible. In some cases it would doubtless be possible to provide an ungraded class in the larger schools where retarded children might be given special attention without diverting too much attention from the larger group of normal children. How far this division of funds is justifiable until Virginia standards for normal rural children are brought closer to national standards is a serious problem in social welfare. At present there are no facilities, except possibly in a very few cases, for caring for such children.

"Fads and Frills."

There appears to be a fairly strong sentiment among rural people that the schools are giving too much time to "fads and frills." By which they mean that so much attention is being given to such subjects as music, drawing, literature, and physical education and to such activities as play, health clubs, interschool contests, character clubs, and the like that the traditional subjects are being neglected. Persons who hold this view say that pupils of any age do not read or spell so well, nor work problems in arithmetic so accurately, or know so many facts in geography and history as they did in an earlier day. As has been stated in preceding pages, the observation of teaching in rural schools led to the conclusion that one of the outstanding weaknesses is a lack of understanding of the principles of habit formation. The survey staff believe that this, rather than the teaching of the newer subjects and activities, is responsible for such deficiencies in the traditional subjects as may exist. Increasing the time given to spelling does not necessarily increase spelling efficiency. In fact too much time may do more harm than good, because the pupil may become unduly fatigued from the extensive study of the same materials. Research has shown that

the method of teaching a subject is, under most conditions, a more important factor than increased time. Again, thorough knowledge of the traditional subjects—especially spelling, reading, and arithmetic—is important, but there are also other equally important knowledges to be learned and other habits and attitudes to be developed. For example, a desire to sing and an ability to do so may add much to happiness. Once this training was given through lyceums, song fests, and the like; but most of these agencies have disappeared, while the number of persons receiving this training in church and Sunday school seems to be decreasing. Hence the public school has begun to take over this function. The same is true of other activities.

Possibly oral reading may not be so well taught today as it was a generation ago, but this is due partly to the emphasis which is given silent reading now. Once oral reading around the family fireside was a common practice. Now it seems to have disappeared almost completely. Silent reading—the ability of the reader to gain thought readily from the printed page—is an important need today and this is what the schools are emphasizing. So with other newer subjects and activities, they are being placed in the school curriculum because of new needs or of needs that are no longer met through home and community agencies.

Further discussion of what the Virginia schools are teaching and why will be found in Divisions II, III and VI of this report.

CHAPTER VII

THE SUPERVISION OF RURAL SCHOOLS

Does Supervision Pay?

No farmer would think of employing a force of men without giving them supervision. Teaching is an infinitely more complicated task than farming or similar work, so that the average teacher is in need of some one with superior training and insight to call to her attention improvements that should be made and to work out with her the most useful ways of securing improvement.

We may note a few situations observed in the visits to Virginia teachers where wise supervision would have meant greater efficiency. A teacher in a thirteen-teacher school was giving the fourth grade a review of multiplication. There were thirty-two members of the class. There was room at the board (if both front and side boards had been utilized) to accommodate about twelve pupils. What the teacher did, however, was to send four pupils to the front board, dictate problems to them and wait for these problems to be worked. They were then explained by the pupils and the process repeated with a second group of four pupils. In all only twelve pupils participated in this recitation. Had the teacher taken thought and sent to the board all that could be accommodated or had she dictated problems for those at their seats, every child would have been active. Most of those in their seats did not even follow what was going on at the board. Here was a loss of fully three-fourths of a class period that even casual supervision could have saved.

A seventh grade class in a two-room school was reading the "Courtship of Miles Standish." Each pupil was called on to read a part of a page. Though errors were made in pronunciation, and the expression of most pupils was lifeless, no effort was made by the teacher to correct the defects. Neither did she undertake to discover just what the words meant to the pupils. A very little supervision would have helped in this case, but the remaking of that teacher to meet modern standards of teaching efficiency would call for the exercise of much efficient supervision over a considerable period of time.

A fifth-grade class in a one-room school was learning the multiplication table. A pupil was called upon to give the table of sevens. When he would hesitate the teacher would supply the answer without giving him time to recall; and this happened not once with one pupil but several times with every pupil. She did not drill any of them on any of their difficulties. The recitation was a total waste of time and effort—probably worse—because bad habits and attitudes were encouraged. A supervisor could have made this teacher see the essentials in correct habit formation.

A fourth-grade class in a twelve-teacher school was dealing with the problem of letterwriting. The letters had been prepared during the study period. The teacher called for the reading of one letter after another. There was much "word-by-word" reading; many words were mispronounced and not corrected; there was often little proper expression. This continued for twenty-five minutes. Teacher and pupils were obviously bored and were hoping the period would soon be up. A supervisor would, among other things, have suggested that the writing of two or three letters on the board and a careful study of them would have created more interest and would have directed attention more clearly to important difficulties of pupils.

A teacher of history in a three-teacher school was doing fairly well except that as she became interested in her work, her voice grew louder and louder. By the close of the period she was talking loudly enough to be heard in the other rooms. Probably a hint from a supervisor would have made her realize that not only was she wasting her own energy but she was making it difficult for pupils to concentrate. Loud, distracting talking by teachers was a rather common fault in the schools observed. However, in one county where supervisors are employed there was hardly a teacher but spoke in a low, thoroughly-controlled voice. When questioned about the matter the superintendent said that this was the result of a concerted move on the part of the supervisors.

A seventh-grade geography teacher who was observed asked question after question regarding specific isolated facts given in the geography textbook. No suggestion was made as to the importance of the facts to the pupils; no attempt was made to relate them to larger concepts. Maps were not even used to assist the pupils. In this case the teacher needs to have her idea of what constitutes good teaching entirely reconstructed. Difficult as the task might be, the observer felt that there was sufficient promise in that teacher to justify the effort.

Experimental Evidence on the Value of Supervision

Evidence as to whether supervision pays may be found in several studies that have been made in recent years. Pittman,¹ carrying on an investigation in South Dakota, in 1919-20, found that after seven months, pupils in supervised schools achieved 194 per cent when compared with the pupils in unsupervised schools. An experiment² in two Indiana counties during the school years 1923-24 and 1924-25 showed that, while the results varied according to subject and grade, still pupils advanced 14.3 per cent faster, on the average, in supervised counties than in those unsupervised. During a five months' demonstration in certain consolidated schools of North Carolina³ in 1924-25, children in supervised classes advanced 2.26 times as fast as children in the unsupervised classes. A similar study,⁴ made in Oakland and Macomb counties, Michigan, in 1924-25, showed 76.0 per cent more achievement by pupils in supervised than in unsupervised schools. Even if supervision should yield much less striking results than in some of the cases cited, it would nevertheless be good economy. Take, for example, the Indiana investigation which gave the least advantage to supervised classes of any of the four mentioned. "On the basis of the same difference in progress for the entire year of 160 days, the two counties with supervisors accomplished the equivalent of 182.9 days of school work; that is, the children in the two counties with supervisors actually received during the regular school year of 160 days the equivalent of 22.9 days of instruction more than they would have received had there been no supervisors. Or, put in other terms, the two counties with supervisors, for an additional expenditure of \$14,021.24 for supervision, purchased the equivalent of 22.9 days of instruction for their children which, at the current daily cost of instruction without supervision, has a value of \$38,559.48. But this is not the real value of supervision; its real value is to be found in the better education obtained by rural children within the time they have at their disposal."

Virginia would do well to carry out a similar investigation under local conditions to see just what effect supervision does have. In lieu of such objective data, it would be convincing if members of boards of education, superintendents and principals were to spend a few days in one of the counties where supervision has been in effect long enough to show results.

Supervision in the Rural Elementary Schools of Virginia

Rural supervision in Virginia dates from 1918 when a special fund was turned over to the State Board of Education for "the establishment and maintenance of rural one-room and two-room and graded schools, and for special supervision thereof." In 1918 the State board adopted the policy of paying up to \$500, but not over one-half the salary of rural supervisors. In 1918-19, thirteen counties provided supervision. In 1919-20, there were fifty-three supervisors in twenty-eight counties; in 1920-21, forty-one in twenty-eight counties; in 1921-22, thirty-one in twenty-one counties; in 1922-23,

¹Pittman, M. S., *The Value of School Supervision*. Warwick and York, Baltimore, 1921.

²Preliminary Report on Supervision in County Demonstrations, Educational Bulletin No. 74, Indiana State Department of Education, Indianapolis, 1924.

³Southall, Maycie. *A Study of the Value of Supervision in Consolidated Schools*. Educational Publication No. 106, State Department of Public Instruction. Raleigh, 1925.

⁴Hopkes, W. O., and others. *The Value of Supervision in the Rural Schools of Oakland County*. Bulletin No. 7, Michigan Education Association.

twenty-five in twenty-one counties; in 1923-24, twenty-eight in twenty-three counties; in 1924-25, twenty-two in seventeen counties; in 1925-26, twenty-four in eighteen counties; and in 1926-27, twenty-two in seventeen counties. In 1927-28, thirty elementary school supervisors were employed in twenty-one of the eighty-eight rural divisions. Up to and including the present school year, fifty-four of the one hundred counties have had supervision for one or more years, but only six—Albemarle, Bedford, Cumberland, Montgomery, Scott, and Warren—have had it for the entire period.

The chief reasons assigned for giving up supervision are three: (1) Economic conditions. During the early years of supervision, the average salary was about \$1,000 and this sometimes included the traveling expenses of the supervisor. Though the State changed its policy in 1922 to pay two-thirds of the salary up to \$1,500, and in 1926 raised its contribution to two-thirds of a salary up to \$3,000, provided the county paid a part at least of the traveling expenses, still some counties have been unable to assume this additional burden. The State Supervisor of Rural Schools says that five counties were deterred from undertaking supervision during the current year for this reason. (2) The difficulty of finding competent persons to take the place of those resigned has caused the work to be dropped in some counties. (3) The difficulty of reaching certain of the more isolated schools was so great in some counties that it was believed that effective supervision could not be carried on.

What Is Good Supervision?

The purpose of a school supervisor is to help a teacher do better work than she otherwise would do. This is a big task that should be undertaken only by those who are well trained and seasoned through intelligently directed experience.

Many abilities are involved in the making of a good supervisor. The following outline will suggest the more important elements entering into the work; it is presented as a simple scale for checking the ideals and activities of the supervisor, and it may be used by the supervisor herself or by some one who wishes to secure a measure of her and her work. By using such terms as "superior," "average," and "inferior" a rating may be given on each of the eleven factors suggested. It is evident that as yet we do not have sufficiently objective standards on most of these items to make valid comparisons where the scale is used by different persons.

Measuring the Professional Ideals and Activities of the Supervisor

I. Objectives:

1. The improvement of instruction primarily. Where clerical and administrative aspects are given attention, they are recognized not as ends in themselves but a means to more effective teaching.

2. Intelligent self-direction by the teacher. We want a teacher who can meet situations wisely, not one who must be forever dependent upon the supervisor.

II. Insight into the educational process and an interpretation of teaching in terms of that process.

3. The growth concept of education should prevail. Where knowledge, drill, etc., are emphasized (and this must be done frequently and effectively) they are considered as means to creating a developing pupil not as ends in themselves.

III. Having a program.

4. Program based upon needs. These needs should be determined as objectively as possible. The efforts of the supervisor should be directed largely to the outstanding needs without neglecting lesser ones that may be met without diverting attention.

IV. Dealing with the teacher.

5. Selection of those weaknesses most fundamental yet most likely to get more effective self-direction by the teacher.

6. Manner of dealing with the teacher. Friendly; helping idea rather than faultfinding.

7. Criticisms are definite and constructive.

8. Versatility in methods of aiding teachers. Use of such methods as: demonstration teaching; group conferences; individual conferences; mimeographed material; reading suggestions.

9. Open-mindedness in attacking problems. Don't assume that your judgment is above criticism.

10. Follow-up of teacher's weaknesses. Keep at them until new attitudes and habits are established.

V. 11. Evidence of professional growth on part of supervisor: Summer school; correspondence or extension courses; reading; investigations; writing.

Unless a supervisor can score high on most of the items it is doubtful if she should be undertaking such vital responsibilities. Until one of superior insight, training and experience can be secured it is better to postpone supervisory work. Such judgments as the observer was able to make of the capability of present supervisors would indicate that most of them would grade about "average" or better on the scale.

Information About Virginia Supervisors and Supervisory Conditions

Table 4 shows that the median amount of training above high school graduation is 4.2 years for twenty-nine of the thirty rural supervisors now employed in Virginia. The best data we have for comparison are those for fourteen States well distributed geographically.¹ The returns for 205 supervisors in these States showed a median of twenty-eight months of training (one month over three years of nine months each) above high school graduation. Of the present Virginia supervisors, only one has had less than two years of such training; and five have had two full years. Seventeen have had four years or more above high school. In the fourteen States cited only thirty-two per cent hold one or more degrees. Six of the Virginia supervisors have had only normal school training while six have had only college or university training. The other seventeen have had both normal school and college training.

(1) Experience

Virginia supervisors have had a median of 5.8 years of experience in grades one to seven; 2.5 years in grades eight to eleven; and 1.8 years elsewhere (usually in normal school or college or as private tutors). All except one of the supervisors reporting have had experience in elementary school, one having had sixteen years of such experience and one twenty-seven years. Seventeen of them have taught in both elementary and high school grades. None have had less than three years of experience as a teacher while six have had fifteen years or more. In addition to experience as a teacher, supervisors have had a median experience as supervisor of 4.2 years. The median experience of the supervisors in the fourteen States was fourteen years, about the same as the total experience (as teacher and supervisor) of those in Virginia. However, it may be questioned as to whether much experience beyond, say, ten years, is more useful than otherwise. This depends upon how intelligently and aggressively the teacher studies her problems.

According to the data secured, twenty-four of the Virginia supervisors have had experience in open country schools; twenty-two in hamlet and village schools, and thirteen in city schools. Seven have had experience in all three types of schools.

The median experience as supervisor is 4.2 years. Nine have had no experience as supervisor previous to this year, while ten have had five years or more.

¹Shumaker, Anna, "Some administrative practices concerning rural supervision in fourteen States." *Journal of Rural Education*, Vol. V, pp. 408-417. The States included in this study were Alabama, California, Delaware, Florida, Louisiana, Maryland, Michigan, Minnesota, New Jersey, North Carolina, Oregon, Tennessee, Virginia and Wisconsin.

(2) Tenure

Virginia supervisors have a median of 1.7 years in their present positions. Eleven are new this year.

(3) Salary

The median yearly salary of Virginia supervisors is \$1,804.30. This is about the same as for supervisors in the fourteen States in 1924-25. For them the median was \$1,800. In that year Virginia and Wisconsin had the lowest median salaries—\$1,500. California had the highest median, \$2,775, with New Jersey not far behind with \$2,700. Virginia salaries vary at present from \$900 per year to \$3,000. The median monthly salary is \$182.50 with a range of between \$100 and \$300. Of twenty-five supervisors reporting, fourteen are employed for nine months, nine for ten months, and two for twelve months.

(4) Supervisory Conditions

In 1924-25, 31.0 per cent of the counties in the fourteen States referred to above had supervision, as compared with 21 per cent. in Virginia in 1927-28. In the fourteen States, there was variation in the counties having supervision from two per cent in Michigan and Minnesota to 100 per cent in Delaware, Maryland, and Wisconsin.

In Virginia the supervisors have a median of 18.6 buildings each and a median of 47.5 teachers under their charge in this year. The range in buildings is from one to fifty-six and in number of teachers from eight to one hundred and fifty-seven. The number of visits of supervisors to teachers in 1926-27 ranged from 126 to 1,040, with a median of 350. The number of individual conferences held ranged from fourteen to 800, with a median of 230. The number of group conferences held varied from four to fifty-four, with a median of nineteen.

From the data secured in the fall of 1927, from Virginia supervisors, we find that when comparisons are made with information regarding 205 supervisors in fourteen States, Virginia supervisors have had about one year more of training; more of them have the equivalent of four years of training above high school graduation; they have had about the same total experience as teachers and supervisors, and they have practically the same annual salary. Virginia does, however, fall considerably behind other States in the median percentage of all counties having supervision.

Keeping Up With the Profession

The insight and breadth of training for a position of instructional leadership demands the equivalent of at least a four-year general and professional course beyond high school graduation. As soon as the supply of trained people begins to catch up with the demand it is doubtful if even the suggested standard will be acceptable.

However much training an educational leader may have had, he cannot afford to rest upon his attainments at any time. Such rapid progress is being made in all phases of education that no one should fail to keep abreast of the newer researches, practices, and ideals. In this respect many Virginia supervisors leave much to be desired, if we may judge by what they did in the way of professional improvement from September, 1926, to September, 1927. Eight of the supervisors misunderstood the question asking for information regarding professional improvement activities. Seven did not answer the question. Of the twelve who gave information, eight attended summer school at a university or normal school, one carried on a correspondence course, and six did professional reading.

Reading and reflecting on new professional literature is, of course, a very useful means of self-improvement. It does not, however, take the place of attendance at an institution where special work is offered in supervision and its related subjects. The survey staff recommend, therefore, that a larger number of supervisors supplement their training by frequent attendance (at least every other year) at a summer session. To encourage this the Board of Education should make some allowance for expenses, especially in those cases where salary is low.

Some one of the State educational institutions should make special provision in its summer session for the supervisory group.

The State Supervisor has held conferences during the annual session of the State Education Association, as well as at other times, and has given a good share of his time to visiting the supervisors at work. These activities should be continued.

The County Superintendent as Supervisor

Data presented in Chapter IX of this report show that the median percentage of time given by county superintendents to supervision is 33.7 per cent. Much of this is probably not supervision, as that term has been defined on preceding pages, but rather *inspection*. Their object is not so much to make a critical analysis of the teacher's work to see where she needs help as it is to pass judgment on her in a general way, especially to discover whether she has the situation fairly well in hand. Several superintendents have said frankly that they have neither the training nor the time to carry on genuine supervision.

A very little thought will show how difficult it is for the typical superintendent to find time to supervise adequately. The average number of teachers in the white elementary schools of each county is ninety-three. In addition, there is an average of thirty-one negro teachers, and twenty-three high-school, evening-school, and part-time teachers in each county. Thus there is an average of one hundred and forty-seven teachers in each county. If the superintendent were to give all his time to supervision he could spend only about one day (the average term in rural schools in 168 days) with each teacher. But to do this is obviously impossible. He has many duties that must be performed—conferring with visitors, looking after finances and supplies, inspecting buildings and directing repairs, attending meetings, etc. If he were to spend the median per cent of all time given to inspection and supervision he could give each teacher only two and one-half hours per year. And this allows no time for travel from one school to another. Obviously his supervision must be superficial even though he be trained to do such work.

The Principal as Supervisor

Data given in Table 18 show that principals as a class are allowed some time for supervision, the median amount varying according to the size of the school. The view is presented in Chapter VII that the principal should be made responsible for the supervision of his school and that the supervisor should work as a specialist with him and through him. This will tend to make the principalship more attractive to alert men and women. Supervisory responsibilities should, of course, be given to principals only as they show themselves able to undertake them wisely. Where additional training is needed, this may be provided through summer study and through supervisory conferences. The more the responsibility for supervision is placed upon the principals of larger schools, the more time the regular supervisor will have to devote herself to the smaller schools.

What Elementary Supervision for Whites Would Cost in a Typical County

The average number of elementary white teachers¹ in a county is ninety-three. It is desirable to have one supervisor to each fifty teachers² (the present standard of practice is 47.5 in those counties maintaining special supervision), so that two supervisors to a county are required. Allowing approximately the present median salary (\$1,804) with \$300 for travel and additional office expense, the cost for supervision in such a county is about \$4,200. The average cost for county school maintenance on the basis of the 1926-27 data is \$110,407. It would, therefore, increase the budget of such a county about 3.8 per cent to provide the amount and quality of supervision needed. This expenditure would make for real economy if the results of supervision should be equal to those in other States where detailed experiments have been carried on. It is not expected that this program can be

¹For a discussion of the supervision of negro schools and high schools see Divisions III and VI.

²This is considered by many as too large a number. Judgments on this vary widely from 25 to 35 teachers per supervisor under rural conditions.

realized at once. For one thing, there are probably not now enough well trained supervisors to supply the need. But each county should set up such a standard as an ideal and work toward it as rapidly as possible.

A Program in Supervision

The survey staff commend the State for the start it has made toward supervision in elementary white schools. They believe that ultimately each county should have enough supervisors to provide approximately one to each fifty teachers, though as schools are consolidated and principals are enabled to do more supervisory work, this proportion of teachers to supervisor may be increased somewhat. The staff recommend the following procedures as being immediately practicable:

1. Every county superintendent should learn enough about school supervision so that he can judge the effectiveness of his specialists. Where there is no special supervisor, the superintendent should train himself to deal with at least the outstanding defects of teachers.

2. Principals should be encouraged to do supervisory work. They should be given time for this as they show themselves willing and able to use the time wisely, and they should be made responsible for the instruction in their schools.

3. As principals do this phase of their work well, supervisors should more and more give their attention to the small schools, though they may continue to act as special advisors to the principals.

4. Superintendents, supervisors, and principals should carry on summer study as one means of improving themselves in supervision. They may also do correspondence work in this field and attend special conferences in their region. Each year the State supervisor should hold supervisory conferences of two or three days in various parts of the State for these three groups of officers. The work should as far as feasible be centered around actual school situations in the locality.

5. To carry out fully the suggestion for regional conferences on supervision, it will be necessary to add at least one member to the rural education staff in the State department. Other assistance will doubtless be needed as the work develops.

6. Some one of the State educational institutions, presumably the University of Virginia, should during the summer session offer special courses in this field beyond present offerings. Provision should be made for advanced undergraduates of ability who have had sufficient experience to prepare for this work during the regular school year.

CHAPTER VIII

THE ORGANIZATION OF RURAL EDUCATION

General Organization

As previously indicated, the one hundred counties of Virginia are combined into eighty-eight divisions for purposes of administering education within those areas. There are several small counties in the eastern section of the State and these have wisely been combined to provide a more adequate unit of organization,

Virginia Has One Form of County Unit

County control of schools in the United States may be classified into four types.¹ (1) There is the type in which the county has practically complete control of all public schools within its area, the only exception being in the large cities. There may be local trustees connected with the schools, but if so these usually are appointed by the county board of education, are responsible to this board and, as a result, usually have only advisory, clerical, custodial, or similar responsibilities. The real control is in the county board of education. To this group belong the States of, for example, Maryland and Louisiana.

(2) In the second type, the county board has similar control except that certain of the larger villages as well as the cities are independent of the county. To this group belong such States as Alabama, Tennessee and Kentucky. The conditions under which districts may be independent of county control vary from State to State. In Alabama, any community having more than 2,000 population must be independent of the county board of education, while any having over 1,000 may be independent if it so desires. In Tennessee, any incorporated place, regardless of size may be independent. There were 322 such districts in 1922. In Virginia the twenty-four cities are independent. Villages of five hundred or more population may be independent, and twenty-eight of the one hundred and seventy such communities in the State are set off as so-called "separate districts." In Virginia, too, there is not complete county financing even of those schools under the county board. The law appears to be open to varying interpretations as shown in Division VII of this report. In eleven of the divisions there is complete county control, but in the seventy-seven other divisions the county finances a certain minimum program which may be supplemented by the old magisterial district, as described on page 92.

(3) In Type 3, educational control is divided between the county and the constituent smaller districts. South Carolina and a few counties in Oregon and Montana are illustrations. The degree of control varies according to the State, but as a rule, chief control is in the county.

(4) In Type 4—illustrated by Ohio, Iowa, Indiana, etc.—control is again divided between the county and the local district; but as a rule, responsibility rests mainly in the local district.

In Virginia, some counties belong to Type 1; others, in which there are separate districts, belong to Type 2; while in regard to financing, seventy-seven of the eighty-eight divisions belong to Type 3, since financial responsibility is divided between the county and the magisterial district.

It will be generally admitted that a local school unit should not be so small that there is neither enough pupils nor enough wealth to maintain a complete elementary and secondary school system. Hence Virginia has done well to break away so largely from the magisterial district. That unit is obviously too small to be effective. The county, therefore, is being substituted as the local unit; and since 1922 great progress has been made toward its complete functioning. But decisions of this sort are always tempered by a people's political philosophy, especially as it is concerned with the centralization of authority. In general, Virginia

¹See Butterworth, Julian E. *Principles of Rural School Administration*, pp. 101-105; 351-361. The Macmillan Co., New York.

may be said to represent a tendency toward a high degree of centralization of educational authority in State and county, as contrasted with the extreme decentralization generally characteristic of the northern, the western, and, to some extent, the northeastern States.

The survey staff believe that the movement toward a strong type of county control is desirable in Virginia. In the first place, the county has had a prominent place in general governmental affairs. Most local governmental functions, except education, have long been performed by the county. In the second place, a large unit is needed to secure even a reasonable degree of equalization of financial burden, since the State now does so little in this direction, as shown in Division IX of this report. In the third place, secondary school facilities are as yet so inadequate in most counties, as shown in Division III, when compared with more advanced States, that a large unit of school administration is needed in order to develop schools of standard quality.

The Local Tax Situation

The present county unit bill provides that the county board of education shall, with the advice of the division superintendent, prepare each year an estimate of the amount of money needed. The tax is then normally levied by the board of supervisors. Presumably the purpose of the law is to provide a means whereby the county shall be made the unit for levying the funds "necessary for the operation of the schools." (Sec. 7f.) At another point (Sec. 7f) the law provides that "nothing in this act shall be construed to affect the present plan of levying district as well as county school taxes." As a result, most counties have both a county and a district levy. Since funds raised by the magisterial district are to be expended within the district, it is evident that the fundamental purpose of the county tax—the equalization of burdens and opportunities among the various districts—is in part invalidated.

The survey staff, therefore, recommend, in the interest of a higher standard of education throughout each county, that the law be so amended as to permit the levying of a tax in the magisterial district only in unusual circumstances, in which needs peculiar to a district should be met. But providing only for a county tax will not insure that sufficient funds to maintain a modern school will be provided. At present eleven of the counties have only a county tax. An analysis of these counties fails to show that a higher standard of schooling is consistently maintained therein. Some levy relatively high rates and are able because of their wealth to maintain schools that rank well up on the efficiency index¹, while others, because of low rates of taxation or but little wealth, or both, rank low on the index. It is, therefore, apparent that other factors are involved. Of these it would seem that lack of interest on the part of citizens in developing modern schools is chiefly responsible. As a means of protecting the schools against this apathy, the survey staff suggest that each county be required to levy a tax that will raise for each full-time teacher employed a sum that is equal to the average raised from local sources in all counties of the State during the preceding year. It is expected that where such a tax would place an undue burden upon the county the State will grant additional aid. The financial details of this plan are presented in Division IX of this report.

Should the Separate District Be Abolished?

As already explained the present law permits a town of more than five hundred inhabitants² to become a separate school district upon the vote of the council of the town. When such action is taken, the council appoints a board of three trustees. While the superintendent of the county in which this separate district is located is also superintendent of the town, and while the town contributes to and shares in the county school fund, it is otherwise independent of the county. It may raise and expend funds and manage its school affairs as does a city or county. Since a place of 5,000 population may be classified as a city for purposes of being a school division, any town over five hundred population and under 5,000 is

¹See Annual Report of the Superintendent of Public Instruction, 1925-26, pp. 27-29.

²Virginia School Laws, 1923, sec. 16d.

eligible to become a separate district. However, of the approximately one hundred and seventy towns in the State of this size, only twenty-eight are at present set off as separate districts.

The survey staff believe that the separate district, when wisely established, may prove to be of advantage. If the separate town sets up higher standards than those prevailing in the county, not only do the children in that community receive benefit therefrom, but there may be an example and a stimulus to the remainder of the county. However, unless the town does actually maintain higher standards than the county as a whole, there is little to justify its becoming a separate district. Since it is very doubtful if the two conditions now established by law—namely, having a population of over five hundred and having the council vote for separation—are really the most significant, the law should be modified. As a substitute, it is recommended that the State Board of Education at the request of the county board should investigate the situation and take final action. Among the factors that should be taken into account in reaching a decision are: The intention and the ability of the town to maintain superior standards, its willingness to accept high-school pupils from the county at actual cost, and evidence that it can and will maintain a high standard of administration. It is recommended that the present plan of having the county superintendent act as superintendent of the town be continued. Provision should also be made whereby a town desiring to become a separate unit may appeal directly to the State Board of Education when the town believes that the county board of education has not considered all the facts fairly. If the legal difficulty of having a taxing area not coterminous with a civil area (an incorporated town or a magisterial district), the survey staff believe that it would often be desirable to have a separate district include not only the town but its contiguous contributing rural areas. A town and the surrounding country generally have functional relations in business and social matters that might be useful in educational matters. Such an arrangement would be particularly useful in developing effective consolidation of schools and providing high school facilities for children in the open country.

The Consolidation Movement

Doctor Alexander Inglis in the former survey of Virginia stated that "of approximately 6,500 noncity schools more than two-thirds are one-room schools, more than one-sixth are two-room schools, and less than one-sixth have three or more rooms each."¹ In 1926-27 the percentage of one-room schools had dropped to fifty-three; the percentage of two-room schools had increased to twenty-four; while schools of three or more rooms had increased to twenty-two per cent. In 1926-27, 1,024 consolidated schools were reported to the State Department of Education. Transportation was provided for 33,252 children, or nearly eight per cent of the entire enrollment, white and negro, in the counties. In all, 1,761 schools have, thus far, been closed through consolidation, one hundred and fifty of these in 1926-27.

It is thus evident that reasonable progress is being made in consolidation. The survey staff recommend a continuance of the policy of eliminating small schools in favor of large ones when local conditions justify. The staff call attention to the importance of making a careful study of each proposed consolidation project before it is entered upon. Children should not be conveyed unreasonable distances; an undue proportion of school income should not go into transportation; and great care should be taken so as not to deprive children in isolated sections from having access to a school.

¹Page 217.

CHAPTER IX

THE ADMINISTRATION OF RURAL EDUCATION

The County Board of Education

One person is chosen from each magisterial district to serve on the county board of education. The size of the board, therefore, varies according to the number of these magisterial districts in the division. Of ninety-nine counties reporting, twenty-five have three members; twenty-four, four members; sixteen, five members; twenty-three, six members; four, seven members; two, eight members; three, nine members; one, eleven members; and one, twelve members. The law forbids a Federal, State, or county officer (with certain exceptions) to act as a member of this board.

Selection

The survey staff recommend that the present method of selection by a school electoral board of three members appointed by the circuit court be changed to popular election in order that citizens may have a more direct voice in local school government. The staff recommend also that the members of the board be elected from the county at large rather than from magisterial districts. Detailed discussion of these matters will be found in Division VII of this report.

The Personnel

Fifty-four and eight-tenths per cent of all county board members (see Table 5 and Figure 5) are farmers; 30.1 per cent are business men; 10.4 per cent, professional men; 2.7 per cent, housewives; 1.4 per cent, salesmen; and 0.6 per cent, laborers. In fifty-nine counties, one-half or more of the board members are farmers; in twenty-eight counties, one-half or more are business men; in three counties, professional men; in one county, salesmen. In three counties all board members are farmers, and in two counties all are business men. Of all board members, 97.1 per cent are men, and only 2.9 per cent are women.

It is not possible to generalize on the usefulness of a member of a board of education because of his being engaged in a certain occupation or because of his membership in a particular social or economic group. While one group may in general be more conservative or apathetic than another group, there are marked differences in individuals. What is essential for a good board member is that he should be interested in securing a progressive type of education for his county, that he should have vision in interpreting its needs, that he should be fearless in standing for what he believes desirable, and that he should be representative of the citizen body in his community. Such a person may come from any group. In general, as data just given show, the members of county boards of education in Virginia are representative of the more important social and occupational groups. Some counties which have representatives from only one or two such groups might well seek members elsewhere in future years. The number of women on boards of education might also be increased. Other factors being equal, it is well to have members from as many groups as possible. Each may contribute something worth while to the discussion and approval of educational policies.

Of the members of present boards, 60.5 per cent live in the open-country (See Table 5); 14.1 per cent in villages under five hundred population; 22.7 per cent in villages over five hundred and under 5,000; and 2.6 per cent in cities of 5,000 or more.

The median length of total service and of continuous service is 6.9 years. Since the term of office is four years, this means that the typical superintendent has served about 1 $\frac{3}{4}$ terms. Only 7.3 per cent have served for five or more terms. Fairly long service by a member is desirable. At the same time, new members tend to bring in new ideas that may have a stimulating influence. The median age of board members is 50.9 years. While this is not excessive it may be useful to call attention to the general tendency for people to become conservative as they grow older. Since only 12.7 per cent of the members are under forty years of

age, it might be well for the people to select during the next few years a larger proportion of the relatively young men and women.

The Division Superintendent

He is the chief professional officer of the division school system. His chief duties are to approve sites, locations, plans, and specifications for school buildings; approve teachers' certificates; report delinquent officers; nominate students to William and Mary College; file required data with the State Department of Education; report district boundaries; issue employment certificates under the Child Labor Law; inspect the accounts of the clerk of the school board; distribute reports, forms, laws, etc., from the State superintendent; enforce the regulations of the State Board of Education; visit and inspect each school in his division; promote the efficiency of teachers; and assign teachers and principals to their positions.

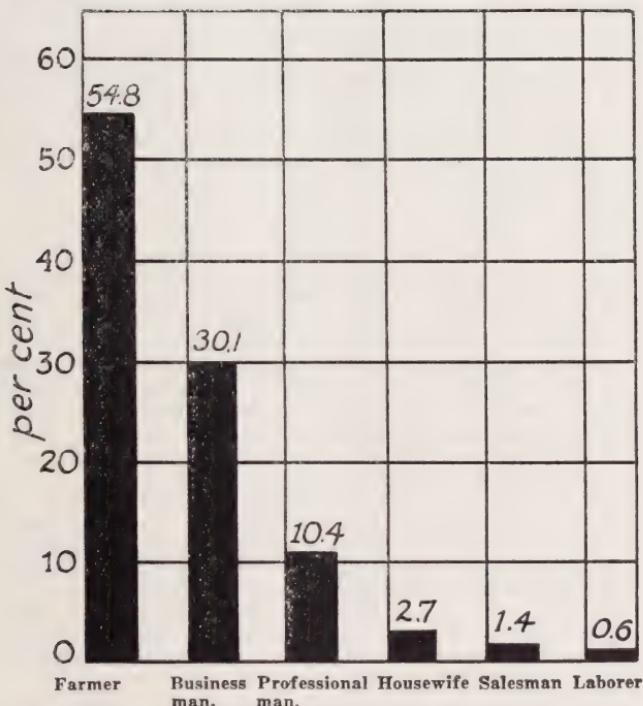


Figure 5.—Occupations of 519 members of county boards of education (1927-28). Percentage in each occupation.

Qualifications

The foregoing list of duties indicates what qualifications are needed for success in this office. The officer must be able to look after details himself or be able to supervise a clerk in doing so. He must be a man of good judgment and be respected by his fellows in order that he may "explain the school system and give information about it on all suitable occasions." If he is to "inspect the accounts of the clerk of the school board" in more than a perfunctory fashion, he must know something of modern school accounting. To approve wisely the sites,

plans, and specifications for school buildings it is necessary that he have a considerable knowledge of hygiene and of modern building standards. If he is really to "promote the efficiency of teachers," he must understand educational objectives, modern methods of teaching, and must be able to make suggestions tactfully. It is not enough that the modern superintendent should possess good judgment and a pleasing personality. These are essential, but they are *merely the beginning*. While it is expected that the superintendent should perform all the foregoing functions personally, he still must know enough of all fields, so that he can pass judgment upon whether work in them is being well done. A school superintendent in these days must be a highly-trained man possessing a breadth and depth of knowledge probably superior to any other person in the typical community.

To eliminate incapable persons from this position the State Board of Education has set up four *minimum* standards. The candidate must (1) hold the equivalent of at least the first-grade certificate and must have had at least three years of experience as a teacher, supervisor, or principal within ten years immediately preceding the beginning of his term of office; or (2) have completed at least two years of college work within ten years, including three session hours of education; or (3) be a full graduate of a standard college within a period of ten years; or (4) be serving as division superintendent in the State. In other words, a person *may* be appointed division superintendent if he has had three years of professional school experience and holds a first-grade certificate. This certificate is considered to be equivalent to the completion of one year's normal school or college work above high school graduation. Let us see what is the training of the superintendents at present.

Training

Table 6 shows that the median number of years of training above high school graduation is 4.6 years. This means that the typical rural superintendent of Virginia has spent sufficient time to complete normally about half the work for a master's degree over and above a four-year college course. However, twenty-five per cent of them have not had four years of training beyond high school; sixty-eight per cent have had only two years of normal school or college training, and thirty-four per cent have had less than one year of such training. On the other hand, 22.7 per cent have had five years of training above high school; 3.4 per cent have had six years; 2.3 per cent have had seven years, and one person, or 1.1 per cent of all, has had eight years.

These data make it clear that, in general, the Virginia rural superintendent is a well trained person as far as this is revealed by amount of training. He is considerably ahead of the typical county superintendent in the United States. For example, in Kentucky only about twelve per cent of the county superintendents have four years of training beyond high school. In Tennessee the estimated average training is two years, and in Wisconsin about two years beyond high school graduation. It should be pointed out, however, that the rural superintendent in Virginia has a much more responsible position than has the county superintendent in other than the county unit States.

The members of the survey staff, who have come in contact with these men, have been impressed by the evidence of the intellectual and cultural attainments of many of them. The survey staff, however, emphasize one need to which the State may now properly direct its attention. This is the improvement in professional training, particularly in the field of administration, on the part of some of the superintendents. From Table 7 it may be seen that the rural superintendent of the State, who has had some such work, has had a median of 7.8 semester hours of training in educational psychology, 8.4 hours in general and special methods, and 7.8 hours in administration. These figures probably understate rather than overstate the situation, since in a few cases the superintendents indicated that they had had "a little" or "a good deal" of such training without giving a definite number of hours. At the same time, attention is called to the fact that 38.7 per cent of the superintendents have had no training in educational psychology; 45.5 per cent, none in general and special methods; and 41.0 per cent, none in administration. While all of these without regular training have undoubtedly done more or less individual reading and study in these fields, such incidental training is lacking in the stimulus to critical discussion, the exchange of experience, and

the use of research materials that should characterize good teaching in these subjects.

As previously indicated, school administration is rapidly being recognized as a task for specialists. The field covers such a variety of problems—buildings, finance, pupil population, teaching personnel, supervision, and the like—that it is quite certain that a desirable standard of attainment cannot be secured in the median of 7.8 semester hours of college study completed by Virginia superintendents.

A further problem arises out of the fact that during the last five years, 64.8 per cent of the rural superintendents have received no professional training, twenty-three and nine-tenths per cent have had from six to twenty-four weeks of study, and 11.3 per cent have had one year or more. The entire field of education is developing so rapidly through the research activities now going on that no one, no matter how much training he may have had earlier, can keep abreast of educational progress unless he keeps on studying.

Therefore every opportunity should be given the superintendent to attend conferences, short courses, summer sessions, and pursue correspondence study work, so far as this may be done without neglect of his professional duties. The State Board of Education is to be commended for granting in recent years certain superintendents leaves of absence to carry on advanced study.

The survey staff believe that, while Virginia is to be congratulated on the general training of its rural superintendents, the State should not become complacent. It should strive for gradual improvement in the following: (1) a higher standard of cultural and general professional training on the part of many superintendents; (2) a more thorough technical training in the field of school administration on the part of most superintendents; (3) keeping up with the rapid development that is going on in professional education for administrators. To accomplish this end the survey staff believe that the University of Virginia should in some manner supplement its present offerings in the summer school for rural school administrators. This may be done in part by providing an alternation of courses, so that certain highly specialized administrative subjects, such as finance and buildings, would be offered only every other or every third year. Thus, without increasing the cost to the University, a more specialized series of courses could be offered. Further discussion of this subject may be found in Division V of this report.

Age, Experience and Tenure

From Table 8 it may be seen that the median age of rural superintendents in Virginia is 41.8 years; that the youngest is but twenty-seven years old, while the oldest is seventy-eight; and that the middle fifty per cent fall between the ages of 35.6 and 53.5. Twelve and five-tenths per cent are sixty years or over.

The median years of experience as superintendent is nine; the range is from one to forty-one years; and the range of the middle fifty per cent is from five to 13.3 years. Only 0.8 per cent have been division superintendents for twenty-five or more years. In Alabama, the estimated average experience of county superintendents is six years; in Tennessee, two years; and in Wisconsin, six years.

The median tenure in the present position is fairly high—8.5 years.

Table 9 presents data showing the breadth of experience. Of the rural superintendents, 37.5 per cent have taught in an open country school; 23.2 per cent in a village elementary school; 5.6 per cent in a city elementary school; 68.1 per cent in a high school, and 13.6 per cent in a normal school or college. Much of the teaching experience in normal schools or colleges has been in the summer sessions of the normal schools or colleges of the State. Thirty-seven and one-half per cent of the superintendents have had experience as principal of an elementary school; 76.1 per cent as principal of a high school; and 20.4 per cent have had other administrative experience. The chief weakness is that 53.4 per cent had no experience in the elementary school at the time of their first appointment to the superintendency. Since the major teaching problems they have to deal with concern the elementary school, experience in elementary school work is essential. The probable explanation

for this lack of experience is that very few men in Virginia enter the elementary teaching field. Even more serious is the fact that 13.8 per cent had no teaching experience of any kind at the time of their first appointment.

This is due to the tendency to choose in times past men from other than the educational field. Table 10 shows that 17.6 per cent of the superintendents were, at the time of their appointment, in such fields as engineering, business, medicine, the ministry, farming, and mail delivery. Some of these have held the position for ten years or more, but most of them have been appointed within that period. Undoubtedly some of these who were selected from other than the teaching profession have had educational experience at some time, and quite possibly all possess to a high degree certain qualities desirable in a county superintendent. The survey staff wish to direct attention again to the highly technical nature of the school administrator's work and to state that training for and experience in educational work is essential for efficient service.

City and Rural Superintendents Compared

Table 6 shows that the median years of training of city superintendents in Virginia is 5.3 years above high school graduation, as compared with the 4.6 years of the rural superintendents. The typical city superintendent has, therefore, over one-half year more training than has the rural superintendent. City superintendents have slightly more training secured in college and university. Table 7 shows that the city superintendents have 5.5 more semester hours to their credit in the three groups of professional subjects than the rural superintendents. Of the city superintendents, eighty-five per cent hold a college degree, as compared with seventy-five per cent of the rural superintendents. During the last five years, forty per cent. of the city superintendents have received training of at least six weeks, as compared with 35.2 per cent. of the rural superintendents. In all these measurable factors, the city superintendents are ahead.

However, the rural superintendents have had a total experience of nine years as division superintendent as compared with 7.5 years for the city superintendents; and they have a median tenure of 8.5 years as compared with a median of 5.5 years for the city superintendents.

Table 10 shows that every city superintendent was engaged in educational work when selected for his present position, as compared with 81.8 per cent of the rural superintendents.

What Does the Superintendent Do?

Superintendent A. L. Bennett¹, of Albemarle County, presents data as follows showing the superintendent's estimate as to how he uses his time:

	Per Cent.
Doing clerical work	22.4
Supervision	33.7
Community meetings	5.5
Traveling	11.8
Interviewing people	10.0
With school board members	5.7
Studying and planning school work	11.5

Roughly, we may say that, according to these data, the typical superintendent gives twenty-three per cent of his time to work of a clerical nature; thirty-four per cent to supervision; and thirty-eight per cent to a variety of duties of an administrative nature. A more detailed analysis of the superintendent's activities may be found in Division VII of this report.

¹Bennett, A. L., Selected Aspects of Rural School Administration in Virginia. (Unpublished.)

Salary

When we turn to an analysis of the compensation of rural superintendents we find one explanation for some of the undesirable conditions described.

The law provides for a minimum salary of \$1,600 when the division has a school population of not less than three thousand. If the school population is less than that figure, the minimum salary is \$1,000, which may be reduced if there is only part time employment. In divisions having over 3,000 in the school population, the superintendent receives a supplementary salary of \$100 for each one hundred school population. One-half the salary to which the superintendent is entitled is paid by the State; the other half by the division. In

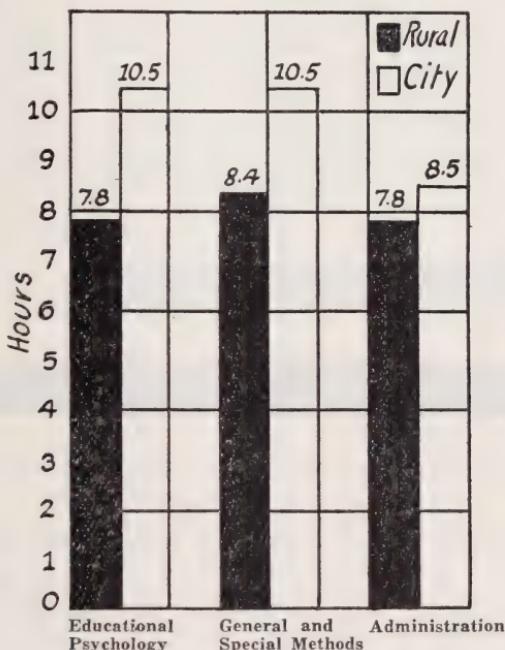


Figure 6.—Median number of semester hours of professional training of rural and city superintendents, 1927-28. (Based upon the date for those who have had some such training.)

1926 all except two of the counties supplemented the superintendent's salary directly or through making allowances for traveling expenses. During 1925-26, the average supplement for these purposes was \$823.23¹.

In the local supplement, if any is made, it is customary to include the allowance for travel and office expense. In eight cases in 1926-27 the superintendent received an additional sum for acting as clerk of the school board. The salary situation may be seen from the following table:

¹Ibid.

	Salary including all supplements paid by the local board	Total for salaries and travel	Net salary
Median	\$2,495	\$2,900	\$2,277
Full range	1,200-5,000	2,025-5,000	1,250
Maximum	5,000	5,000	
Minimum	1,200	1,600	790
Range of middle 50 per cent	2,000-3,000	2,025-3,320	1,700-2,745

Some of the salaries are fairly good. Others, however, are not such as will attract the type of men needed. This latter statement may be appreciated more fully if we reduce the salary to a per diem basis. If a superintendent meets efficiently the various situations in his district, he should have almost constant contact with the problems to be solved. He may properly be released for limited periods for professional training, but even then he should know what is being done in his schools. If we consider that he should give eleven and one-half months to his work, for five and one-half days per week, the median net salary of \$2,277 would give him \$8.28 per day. If he received only \$1,700, which is the median of the lowest half of the superintendents as to salary, he would receive \$6.18; while the superintendent paid \$1,250 would have \$4.55 per day.

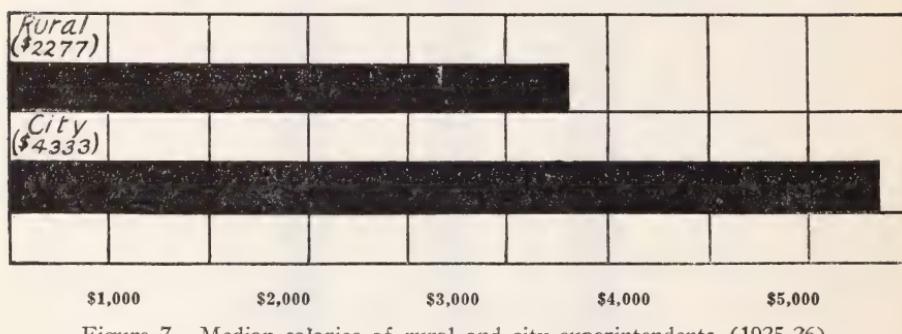


Figure 7.—Median salaries of rural and city superintendents (1925-26).

Compare now the salary of the rural with the city superintendents of Virginia. According to Table 11, the median salary for them is \$4.333, or \$2,056 higher than the median for rural superintendents. The lowest salary for a city superintendent, \$2,400, is \$123 higher than the median for the rural superintendents. In the judgment of the survey staff, Virginia will be unable to hold her more capable rural superintendents if the present situation as to salary continues.

Travel and Office Expense

The law permits local boards to make appropriations for travel and office expense. Bennett's study¹ shows that, according to the reports of the superintendents themselves, all rural superintendents in 1926-27, except eighteen, had some such allowance. The amounts given varied from forty-five to one thousand dollars. The average was \$345.43. The actual expense reported varied from eighty dollars to \$1,350, with an average of \$580.32. In a few cases no definite amounts were stated, some being paid on a mileage basis, while six were paid all expenses. According to those who know the State the situation in this respect is better than it was ten years ago.

While recognizing the marked improvement in this respect, the survey staff feel that they should call attention to certain factors in the present situation. Only a few of the superintendents report that they receive all their actual expenses. For example, one reports an allowance of \$100 and an actual expense of \$550, with a total net salary of \$1,690; a second, an allowance of \$250, an expense of \$625, and a net salary of \$1,885; a third, no allowance, an expense

¹Ibid.

of \$300, and a net salary of \$1,700. It is, of course, unfair to the superintendent to expect him to pay the expenses of his travel and office from his meager salary. It leads him to neglect certain activities that ought to be engaged in because it means an expense to him personally. The survey staff recommend, therefore, that school boards follow the policy of having the superintendent include in his budget a detailed statement of office and travel expense based upon previous experience. Bills on these items should then be presented, allowed as other bills, and the total allowance for this purpose should be changed only by the procedure followed in making other changes in budget allowances. This will tend to control unreasonable travel and office expenses.

Clerical Assistance

In an organization the size of the typical school division, there are many duties of a clerical nature,—writing letters; preparing mimeograph sheets; ordering, checking and distributing textbooks and other supplies; preparing vouchers, etc. These duties must be attended to whether or not teachers are supervised, buildings are inspected, or administrative policies are carefully considered.

In thirty-one of the rural divisions the superintendent in 1926-27 had no clerical help; in eighteen divisions he had the half time or less of one clerk; in thirty-six divisions, one clerk; in three divisions, one and one-half time clerk. True economy would be promoted if the superintendent were relieved of clerical duties so that he could give attention to more significant matters. It is clearly poor business policy for a professional officer to perform duties that could be as well done by one paid only a fraction of his salary.

Office Room and Equipment

Thirteen of the rural division superintendents were not furnished an office in 1926-27. In such cases the office is likely to be in the superintendent's home, though in some cases he rents an office at his own cost. Thirty-one superintendents had offices in court houses; thirty-eight in rented quarters; and six in school buildings. In forty cases, the superintendent had only one room; in twenty-seven, two rooms; in seven, three rooms; in one, four rooms. In many cases the need for additional room is pressing; in others it is one of the things that should be supplied as soon as it may be done without sacrificing other needs. Of seven county superintendents' offices visited by a member of the survey staff, only one afforded anywhere near enough of space.

All but one of the eighty superintendents giving information in the fall of 1927 have a typewriter. Nine do not have an adding machine or ready access to one. This is usually considered necessary equipment for one dealing with a large number of statistics. Eight do not have a mimeograph for reproducing instructions to or helps for teachers. Of thirty superintendents giving information only thirteen have a fireproof vault or ready access to one. It is, of course, important that valuable records be kept where there is little danger of their being destroyed by fire. Five superintendents report cases within their experience or observation where serious loss has resulted because there was no adequate way of protecting records.

Length of School Term

From Table 12 it may be seen that the median average length of the school term in the counties is 168 days, as compared with 181 days in the cities of the State. The range in average term is from 131 to 190 days. The median longest term in the counties is 180 days and the median shortest term is 145 days.

Buildings, Grounds and Permanent Equipment

In Chapter LXI, Division X, detailed information is given regarding the housing of school children. In this chapter it will be necessary only to call attention to several conclusions regarding these matters.

1. In very many cases the school building does not meet modern standards of hygiene and building construction. Especially is this true of the smaller schools. The lighting is generally inadequate in amount and the windows are improperly placed. Desks are usually of the non-adjustable type, and maladjustment of pupil to seat and desk is common. Shades are frequently torn and unattractive, where they are not entirely lacking. Grounds are as a whole unattractive. Speaking generally, the situation as to the physical plant is such as to discourage or make impossible good housekeeping.

2. Buildings differ in quality in different counties, those close to large cities being generally the better.

3. Where consolidation on a large scale has taken place, the buildings are generally in accordance with modern standards.

While some of the more significant needs of buildings affecting the health of children should be remedied at the earliest possible moment, the survey staff believe that in general additional funds should first go to improving the human factors in the school system—teaching, supervision, and administration.

Standardization

Beginning in 1910, Virginia entered upon a policy of stimulating through State funds the development of superior elementary schools. The amount of State aid granted for this purpose from time to time and the basis employed in distributing the available funds may be seen in the following outline:

Date	Amount of Appropriation	Basis of Distribution of State Funds.
1910	\$25,000	To "Graded and Elementary Teachers."
1912	75,000	To "Graded and Elementary Teachers."
1918	225,000	\$20 to each Elementary Teacher.
1921-1922 (Act of 1920)	400,000	Standard Elementary Schools: One hundred and fifty dollars to a one-room school; \$225 to a two-room school; \$300 to a school of three or more rooms. \$100 to each school truck hauling children. Balance on <i>per teacher basis</i> .
1925-1926	440,000	Same basis as above to standard schools. Twenty-five cents per pupil mile instead of flat \$100 for each school truck. Balance on <i>per teacher basis</i> .
1927-1928	440,000	\$150 to each standard one-room school; \$225 to each two-room school; \$300 to each three-room school; \$100 to each additional standard elementary school room and to each standard room in the elementary schools connected with consolidated high school. (Truck reimbursement eliminated.) Balance to teachers holding normal professional certificate or better.

The number of schools accepted as standard since 1923-24 are:

	One room	Two rooms.	Three or	Total
			more rooms.	
1923-24	108	148	208	464
1924-25	146	185	249	580
1925-26	238	243	303	784
1926-27	270	293	351	914

As will be seen, there has been a gradual increase in the number of standard schools. The increase in the number of one-room schools is especially encourag-

ing. At the same time, there were fifty-five of the one hundred counties in 1923-24 that had no standard school and in 1926-27 there were still forty-two counties without one. That there is much to be accomplished in his direction is evident when it is realized that only about sixteen per cent of all schools (for white and negroes) were accepted as standard in 1926-27.

The survey staff believe that such a financial inducement serves a real purpose in stimulating communities to provide better schools and they recommend a continuance of this policy. Since, however, failure to provide a school of the standard type is not always caused by community apathy alone but is often due to financial inability, the staff believe that the State should enter upon a policy of helping those counties that are in greatest need of assistance, as shown in Division IX of this report.

CHAPTER X

THE PRINCIPALSHIP

Distribution of Schools According to Size

Data reported to the State superintendent's office for 1926-27 show that of 3,890 school buildings for whites, 1,887 had one room, 951 had two rooms, 264 had three rooms, while 788 had four or more rooms. This chapter deals with the latter group. The lower limit of size for this study was set at four teachers, since head teachers in smaller schools than that seldom have real principalship functions,—they give practically their whole time to teaching.

Data secured in the fall of 1927 from 346 of the 800 schools (approximately) of the size indicated, show the number of schools in each of six groups:

	Number of schools
A. Elementary grades only:	
a. Four to five teachers	34
b. Six or more teachers	21
B. Elementary and high school grades:	
a. Four to five teachers	51
b. Six to ten teachers	153
c. Eleven to fifteen teachers	58
d. Sixteen or more teachers	29

If these schools are representative of all in the State having four or more teachers, it is seen that the most prevalent type of school is one of from six to ten teachers having both elementary and high school grades. Only 15.9 per cent are devoted exclusively to elementary work.

Some Characteristics of These Schools

In Table 13, information is given regarding the size of these schools. The median school of four or five teachers doing combined elementary and high school work has 1.8 teachers in grades eight to eleven, giving instruction to seventeen pupils. In the six to ten group, a median of 3.7 teachers give instruction to fifty-six high school pupils. It is interesting to note that the percentage that the median high school enrollment is of that in the elementary school increases from nineteen per cent in the schools of four or five teachers to forty-two per cent in those of six to ten teachers. It is thirty-six per cent and thirty-eight per cent for the two groups of larger schools. This larger enrollment proportionately is probably due in part to the fact that the larger schools offer more grades of instruction. For example, in the four or five teacher school, nearly all offer only nine grades of work, whereas the larger schools almost without exception offer eleven grades. There may, however, be other factors involved, such as more facilities and, presumably, more conditions attractive to those seeking a high-school training. It is worth noting, too, that as the size of the school increases the number of pupils per teacher increases. On the basis of the median figures, there are nineteen, twenty-two, twenty-four and twenty-nine elementary and high school pupils, respectively, for each teacher in each of the four groups.

Some Characteristics of the Principal

The proportion of men principals in schools having elementary grades alone is small. In schools of four or five teachers, only 14.7 per cent are men, while in schools of six or more teachers, 19.4 per cent are men. In schools having combined elementary and high school grades, the men principals far outnumber the women. The percentage of men is 64.7, 88.3, 95.0 and 93.1, respectively, for each of the four groups.

(1) Age

Principals (usually women) in schools having only elementary grades are quite mature, especially in the larger schools (see Table 14). The median ages are thirty-two for the four or five teacher schools and forty-two for those of six or more teachers. The combined elementary and high schools are, however, attracting persons (usually men) who are under thirty-five. The median age varies from twenty-six to thirty-four, the younger ones being in the smaller schools.

(2) Number of Years in Present Position

The medians (Table 14) vary from 2.0 years to 3.7 years, the principals in the smaller schools having the shorter tenure. In no case is the median as high as might be desired,—a median term of 3.7 years is ordinarily too short for a person to render fullest service to the community.

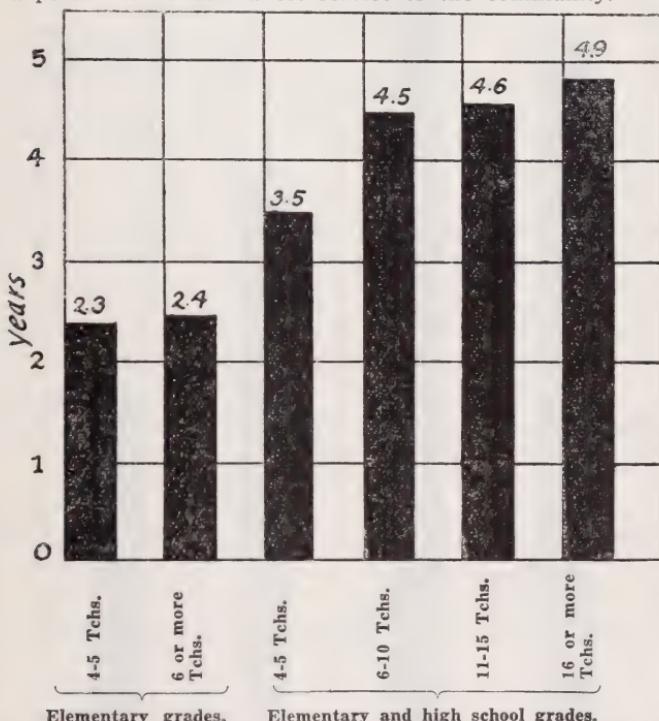


Figure 8.—Median number of years principals of 346 schools of four or more teachers have attended normal school and college.

(3) Experience

A glance at Table 15 will show that principals of schools having both elementary and high school grades have had most of their experience in the high school. This is of significance as throwing light upon the probable interest of the principal in the elementary school as contrasted with the high school, and his ability to supervise the work in the lower grades. In general, the length of experience increases with the size of the school.

(4) Training

From Table 16 it may be seen that the median number of years of training of principals above high school graduation increases as the size

of the school increases, and that principals in combined elementary and secondary schools exceed in length of training those in charge of elementary grades only. The median for the principals in the combined grades falls above college graduation in three cases and in the fourth case falls close

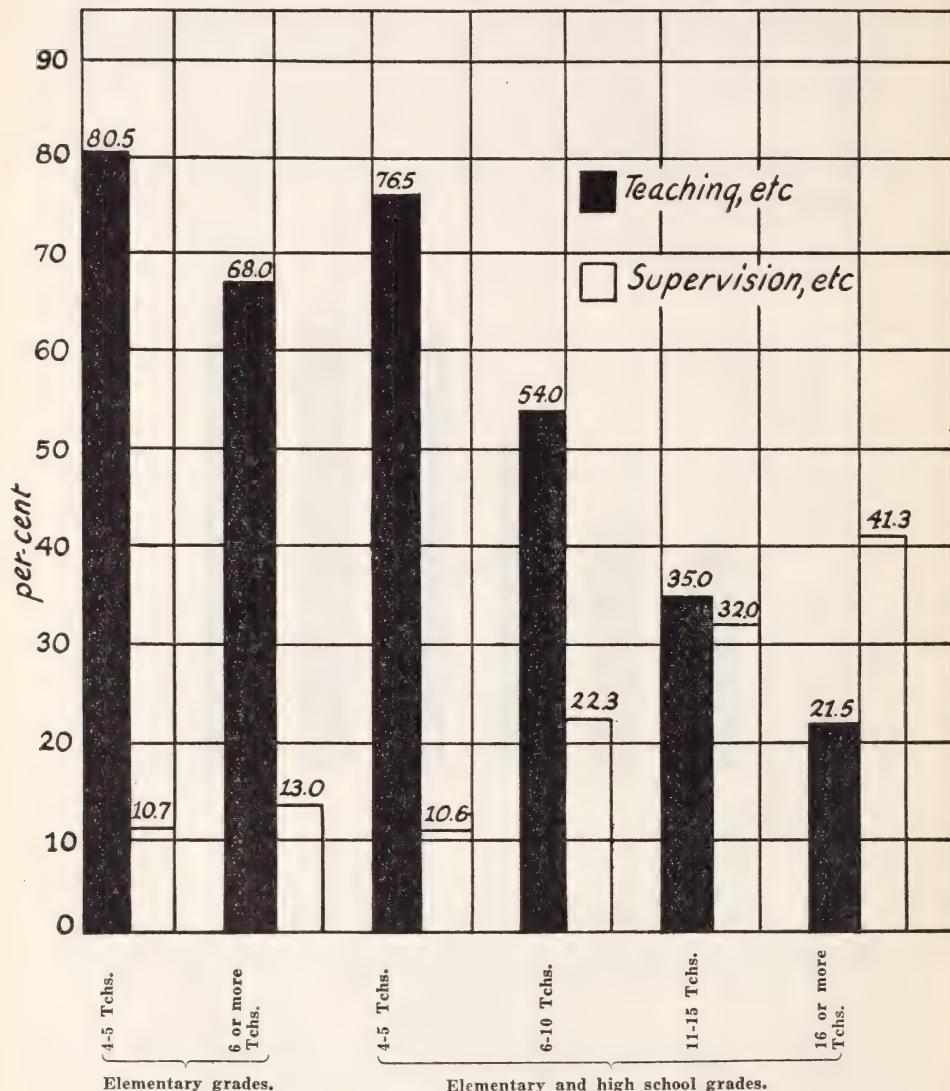


Figure 9.—Percentage of school days of principals of 346 schools of four or more teachers, devoted to teaching, etc., and to supervision, etc. (October, 1927).

to college graduation. The two groups in larger schools have a median training equal to or larger than that of the county superintendents (4.6 years). The principals of schools having elementary grades only have a little better than the equivalent of normal school training. Principals of

schools having high school grades come largely from the colleges and the universities, while about sixty per cent of principals of elementary grades have had some college training.

The median amount of training in professional subjects may be seen in Table 17. The amount is, on the whole, very satisfactory, except in school administration. It should not be forgotten, however, that many principals do not have any regular training in this subject,—not sufficient for those who are to direct a school. One-fourth of them have had not more than from 0.8 to 2.8 semester hours in this subject—hardly enough to teach the general organization of the school and to set up administrative ideals. The many techniques involved can certainly not be well taught in this amount of time. The training for supervision is more nearly adequate. In the principles of education group (which includes general and special methods as well as specific courses in supervision) the medians vary from 9.4 to 17.0 semester hours.

What the Principal Does With His School Day

As might be expected, the amount of teaching done by the principal decreases as the size of the school increases. The principals of the four or five teacher elementary schools give 80.5 per cent of the school day (according to their own analysis), while the principals of the combined elementary and high schools with sixteen or more teachers give only 21.5 per cent of the school day to teaching. As a result, there is an increase in time given to other kinds of work in the larger schools. According to the data in Table 18, the typical principal in a combined school of six to ten teachers has almost one-fifth of his day for supervision (visiting classes, conferences with teachers about their work, etc.). Counting seven hours to the school day (8:30-12:00 and 1:00-4:30), the principal of such a school has about one and a half hours per day for supervision. During this time he should be able to visit from two to three classes, so that in the course of a month he could, even in a school with ten teachers, give each teacher about three hours. This should be sufficient to do reasonably effective supervision with the typical teacher. However, a study of the ranges in Table 18 will show that, except in the two groups of larger schools, some principals have no time or practically none for supervision. These data are based upon the estimates made by the principals themselves as to how they use their time.

Principals give a median of from 12.0 to 23.5 per cent of their school day to administration (including conferences with pupils and parents; planning work of the school; directing athletics and other pupil activities). While we have no reliable standards for such matters, the principals have on the whole a fair amount of time for administrative duties.

Clerical work (including work that could be done by a clerk such as keeping records, handling supplies, making up orders, mimeographing, etc.) takes from 5.2 to 14.5 per cent of the school day. It is especially worthy of note that the principals in the larger schools give more time to this than do those in the smaller schools; in spite of the larger amount of clerical work in the larger schools, there is little tendency to provide a clerk for the principal. While it might not be feasible to have a clerk in the smaller schools, there are many of the larger schools in which it would pay to have at least a part-time clerk. It is not good economy to ask a principal, a relatively well paid person, to do what one paid a third as much can do practically as well. It would be much better for the school and the community if the principal were to devote himself to supervision and administration, or even to teaching.

The Responsibility of the Principal

Data regarding this matter are given in Table 19. If we take the largest group of schools—the one with six to ten teachers having both elementary and high-school grades—we see that rather infrequently does the principal

have full responsibility for nominating teachers. In 56.0 per cent of the schools nomination is made by the county superintendent alone, while in 41.2 pre cent, the principal and the superintendent confer. The latter is probably the best procedure as a rule. In assigning teachers to their work within the school, the principal alone is responsible in 39.0 per cent of the schools, the superintendent alone in 23.0 per cent, and the two together in 38.0 per cent. The determination of the teacher's salaries rests practically always with the superintendent as does also the preparation of the budget for the school. On the other hand, the principal (speaking still of the six to ten teacher group having both elementary and high school grades) chooses books for the school library in 86.9 per cent of the cases; selects equipment in 59.8 per cent; selects supplies in 58.2 per cent; controls pupils in ordinary cases for discipline in 98.6 per cent; deals with other community groups and with patrons in 75.0 per cent of the schools. In controlling pupils in cases involving suspension or expulsion, the prevailing tendency is, as is proper, for the principal and superintendent to confer. Supervision of instruction is performed entirely by the principal in 54.1 per cent of the schools, by the superintendent in 5.8 per cent, and by the two together in 40.1 per cent. The reader should understand that this statement of division of duties is made on the basis of the situation as a whole, and that there are doubtless many variations in dealing with specific matters within these groups of activities.

Speaking generally, the larger the school the more frequently the principal is given entire responsibility, though exceptions exist in respect to the preparation of the budget, selecting equipment and supplies, and dealing with individuals and groups in the community. These variations are probably to be accounted for largely by the different policies pursued in different counties in giving responsibility to the principal.

Developing the Principalship

The principal of the school has an important educational post. He is in a position to deal more effectively with problems of internal administration than is any other officer in the system. He is the one who, because of his immediate contact with the problems, should handle cases of ordinary discipline, select books, equipment and supplies, and deal largely with members of the community on school questions concerning the particular school as contrasted with problems affecting the whole county system. Though there are many exceptions, the general tendency in Virginia is to place these responsibilities upon the principal.

The principal should, in the judgment of the survey staff, have general responsibility for supervision, but he will often need the assistance of a specialist such as a full-time supervisor should be. To insure that he has responsibility, the supervisor from the county office should usually report to the principal when she arrives at the school, secure his suggestions as to where her efforts may best go, and report to him on leaving what she has done. If the principal and supervisor have worked together for some time and understand each other perfectly it may not be necessary to be so punctilious on each visit. Where the county superintendent does supervisory work, the same procedure should be followed. Unless the principal knows what the supervisor or superintendent is doing for his teachers, it is impossible for him to plan his own activities wisely. Unless he has responsibility for supervision he cannot be held responsible for the success or failure of the school. In general, Virginia supervisors follow the policy outlined, and for this they are to be commended.

In other matters, action should be taken only after the superintendent and the principal have consulted. In nominating teachers, in assigning any teacher to her work, in determining her salary (especially if she is not new to the school), and in planning the budget, the principal should have a voice. While the survey staff recognize that the extent to which duties

may be left with the principal depends upon his ability and training, they recommend that superintendents adopt a more liberal policy of consulting with their principals in respect to the duties just mentioned.

The data given in preceding sections of this chapter show that as a whole principals have the general training needed and are allowed time for dealing with administrative and supervisory problems. It is true that many have not had as much elementary school experience as they should have had and that their training in administration and in certain aspects of supervision is not all that it should be. Nevertheless, the superintendent should follow the policy of giving the principal responsibility as rapidly as he shows himself competent to assume it. When this is done, there is likely to be a tendency for the principal to supplement his training and to overcome his weaknesses in order to assume still larger responsibilities.

When this policy is followed, the superintendent will find himself gradually relieved of many duties that now interfere with large leadership. He will at the same time be favoring a situation necessary for the development of competent men and women in each school. Growth in ability of his coworkers should be of concern to the real superintendent. As a strong county system of school control is developed, it becomes more and more important that the superintendent delegate responsibilities to his assistants, if the various communities of the county are not to feel needlessly restricted in dealing with local problems. In fact, one good measure of a county superintendent may well be his success in getting principals to assume *in an effective way* as many as possible of the responsibilities regarding their particular schools.

The survey staff believe that even in a school of less than four teachers there should be a policy of placing in charge some one who has experience, training, and ability above the average teacher. Even if such a person has to do full time teaching, she may, nevertheless, be helpful to the less experienced teachers through aiding in teaching difficulties, having responsibility for discipline, and assuming general oversight of the school. Genuine supervision will then need to be left to the supervisor attached to the county office.

CHAPTER XI

THE LEADERSHIP ACTIVITIES OF SUPERINTENDENTS

It is to be expected that the citizen body will, in general, delegate to its representatives, the Board of Education, the direction of the schools. But if we are to have a progressive school system in a democratic society, it is imperative that the public be kept reasonably well informed regarding educational affairs. Education is not a matter of schools only. Every experience, whether in home, in church, or on the playground, has some influence. Hence parents who understand thoroughly the idea of development that characterizes our modern education may do much to control the out-of-school influences that touch children and young people. Usually when a community understands the policies that the school board and the superintendent are trying to initiate (for example, consolidating a certain group of schools for increased efficiency, or organizing a junior high school, or introducing agriculture into the curriculum), it is easier to make that policy effective. If at least a working majority of citizens does not favor an important school policy, it is doubtful if it should be initiated. If additional funds are needed for schools, it is evident that if the public understands what the officials are trying to do and believes in those things, it will be easier to secure the funds. It is hardly conceivable that a community will vote bonds for school buildings, for example, unless it considers the proposed expenditure to be desirable.

The Public Has Been too Much Ignored in Virginia

The people themselves have almost no direct control over their school boards since the members are not elected by them but are appointed by an electoral board which is in turn appointed by the circuit judge. A complete discussion of this situation will be found in Division VII of this report. Furthermore, there is not much effective activity in leading citizens to understand and to desire a modern school system.

Certain Leadership Activities of Division Superintendents

Table 20 gives information regarding certain significant leadership activities of rural superintendents. Public meetings of one sort or another often afford a good opportunity to present school questions to citizens. In 1926-27, the median number of such meetings addressed by the superintendent for the purpose of educating citizens respecting school needs was 14.4. Some superintendents did very little along this line and some did a great deal, as shown by the range of one to one hundred and forty-nine. The median percentage of schools having a parent-teacher association or a unit of the Virginia Cooperative Education Association giving considerable attention to school needs was 69.4. Fourteen counties reported every school as having such an organization, while only one reported less than ten per cent of the schools having one. Such groups afford a particularly effective means of reaching the public on school matters. The median number of times a newspaper was used during the year for this purpose was 13.4 with a range of one to two hundred. Superintendents sometimes complain that newspapers do not want to take such material except as advertising. A median of 1.7 county or local school fairs were held during the year; the range was from none to twelve. The median number of county or local field days held during the year was 1.6, with a range from none to twenty-five. The median number of different circular letters to parents or other citizens on school questions was 3.6, with a range from none to forty.

A large proportion of the superintendents issue an annual report. For the most part, however, these reports include only the financial statement for the year. Usually they are so presented that they are neither interesting nor meaningful to most people. In contrast, a very effective report is issued in Prince George county. This report is written primarily for citizens. It gives information about important school questions, and does it in a manner likely to be effective with the average citizen. Other superintendents could well follow Prince George's example. The report is in mimeographed form, attractively bound in heavy paper covers. Four superintendents issue a school bulletin. The ones published in Dinwiddie and Dickenson counties are particularly good.

In addition to the foregoing, superintendents use such other methods of leadership as: Personal conferences; visits to school by patrons; posters on certain school problems such as health; meeting of county officers with board of education; open board meetings; county commencement exercises; league rallies; child health day exercises; visiting homes by teachers and superintendent; patron's days; individual letters to influential citizens.

The survey staff believe that as the public understands more completely what the schools are doing now and the ideals toward which they are striving, there will be a better tone throughout the system. Therefore, the staff urges school officers, especially superintendents, to study the situation in their respective divisions and to use any and all methods of leadership that seem likely to be effective.

Existing Organizations That May be Utilized in Leadership Activities

Where there are organizations or agencies in the community interested in educational problems, directly or indirectly, the superintendent has valuable aids to leadership that should not be neglected.

In Chapters LXXIII and LXIV, Division X, of this report there will be found a detailed presentation of the aims and work of the Cooperative Education Association of Virginia and the Virginia Congress of Parents and Teachers; but it may be said briefly here that according to its motto, the aims of the Cooperative Education Association are: "Every public school in Virginia is a community center where the citizens may unite for the improvement of their educational, social, moral, physical, civic, and economic interests." The Congress of Parents and Teachers states as its aims the promotion of child welfare in home, school, church and community,—"To bring into closer relation the home and the school, that parents and teachers may cooperate intelligently in the training of the child; to develop between educators and the general public such united effort as will secure for every child the highest advantages in physical, mental, moral, and spiritual education." From their statements of aims, it can be seen that these two organizations have much the same objectives and seek the support of practically the same groups.

The Cooperative Education Association is purely a State organization without National affiliations. It was called into existence in 1904 by the State's educational leaders to assist in a forward educational movement. Since that time the community, or school leagues, as the locals of the association are called, have played an important part in Virginia's educational progress of the last quarter of a century. Several local leagues are now found in every county in the State and in nearly all of the cities. Supplementing public funds for school buildings, equipment, and libraries, and for teachers' salaries, and improvement of school grounds, have absorbed much of the energy of these leagues. Altogether the community leagues, during their nearly a quarter of a century of effort, have raised many hundreds of thousands of dollars for the several activities listed. Many of them have also given attention to health questions and other matters of community concern, as well as to sponsoring various recreational activities. The

promotion of acquaintanceship and cooperation between parents and teachers has been one of the most valuable phases of their work.

The junior leagues, of which there are now over five hundred, organized to promote and correlate the extra curricular activities of the schools, have been one of the most valuable developments of the association's program.

A review of the annual reports and other literature published by the association, as well as their annual meeting programs, would indicate that the chief emphasis is placed on the lines of work enumerated above and that relatively less attention is given to promoting serious study of fundamental educational policies, or the support of needed State-wide measures essential for putting the educational system on a permanent footing of the greatest efficiency. Recently, however, there has been increasing attention given to a study of questions of child psychology.

The Congress of Parents and Teachers is a National organization. The Virginia branch was organized in 1921. It now claims local units in all the cities of the State and in half of the counties. Though carrying on much the same type of activities as the Cooperative Education Association, the Congress of Parents and Teachers, both in the local programs and in the annual State meetings, has given somewhat more emphasis to a study of adolescent psychology and educational policies than has the former organization.

Both these organizations receive some State subsidy; hence, they are both semi-public agencies. Since the headquarters' offices of both have limited resources for giving assistance to their local units, the success of these local units depends almost entirely on the local leadership. Where this is good the organization usually does good work. Where it is lacking or poor, the organization is a failure and soon dies. While both organizations are doing valuable work, both together have not, as yet, succeeded in enrolling one in twenty of those whose support they seek.

The Negro organization society, which is now organized in some six hundred communities, is modeled after the Cooperative Education Association and carries on the same type of work among Negroes which the latter does among the whites.

The Virginia Education Association, which is composed, for the most part, of those officially connected with the school system—teachers, superintendents, and trustees—is the voluntary organization which, after those just described, most actively concerns itself with educational questions. The programs presented at the several district meetings and the annual State meeting, as well as articles appearing in the organ of the association, the Virginia Journal of Education, help to educate those professionally connected with the educational system as to desirable educational policies; and through them, to some extent, the general public.

The several types of farmers' organizations and councils operating in the State, in their statements of objectives, all claim to be concerned with promoting the best educational conditions. Furthermore, education related especially to the various aspects of country life is supposed to be their particular responsibility. Giving support to the county agricultural and home agents' work, including the 4-H Clubs and the agricultural high schools, is one important way in which these organizations, especially the county agricultural advisory and home advisory councils, are meeting their responsibilities. Further than this, they are meeting to only a slight degree the responsibility of promoting a systematic study of the great body of knowledge bearing on the various aspects of country life and the proper attitudes toward this knowledge—a body of knowledge, which, if generally known and used, would double the efficiency of country life and institutions. Neither are they doing a great deal to form intelligent public opinion on, or arouse public interest in, the State policies necessary to bring rural educational facilities to a par with those available to other groups.

The League of Women Voters has held, in cooperation with the State University, several citizenship institutes. The speeches at these meetings have been a valuable contribution to citizenship education, including questions of State educational policy.

The urban service clubs forms a valuable medium through which representatives of the educational system can get statements as to educational conditions and needs before influential business and professional men. Occasionally such clubs actively interest themselves in some special local educational problem or help to sponsor some particular educational movement, as the Boy Scouts, educational work for the blind, and so on.

Occasionally churches concern themselves with local school conditions and problems and try to aid by arousing public interest and consciousness of community responsibility. Such activities on the part of the churches, however, are the exception rather than the rule. For the most part their educational effort is related primarily to the church schools and colleges and the restricted educational program of the various church societies, rather than to questions pertaining to the public school system. The fraternal orders likewise only occasionally concern themselves with public educational problems and policies.

This brief review of the educational activities of voluntary organizations would seem to justify the conclusion that they have been and are an important factor in Virginia's educational progress; that as the situation changes and develops they need to make adjustments in their program of activities, and that as material needs are more fully met, voluntary organizations should spend a greater proportion of their energies in a study of educational problems and policies and in forming intelligent public opinion on educational questions.

CHAPTER XII

RECOMMENDATIONS FOR A PROGRAM IN RURAL EDUCATION

Data given throughout the preceding pages emphasize the fact that school facilities in the counties of Virginia are generally inferior to those in the cities of the State and in the more progressive States of the Union. Much as it may be desired to make improvements quickly, it is reasonably certain that in Virginia, as in any other State, the necessary adjustments must come gradually. Accordingly, this chapter brings together the recommendations contained in the foregoing pages into a program that it is believed will be practicable in Virginia. Some of these recommendations naturally call for considerably increased expenditures, but others call only for a redirection of energy by citizens or school people, or involve relatively small expenditures.

1. In the judgment of the survey staff, more general and more effective supervision of instruction will yield immediate returns of value to the State.

a. The county superintendent should train himself so that he may judge intelligently how well his supervisors are doing, and may be able himself to aid teachers to solve their more obvious teaching problems.

b. The principal should be encouraged to undertake the supervision of instruction in his own school and as he shows a willingness and an ability to do this, reasonable time from teaching should be allowed.

c. But the principal will often need the aid of a specialist to deal with problems with which he is not familiar. The special supervisor attached to the office of the county superintendent may serve as such a specialist though she will usually give most of her time to the smaller schools that have no supervising principal. Experiments show that supervision yields educational returns far beyond the cost of supervision,—an increase in teaching efficiency of from 14.3 per cent to 126.0 per cent. Data are presented in Chapter IV showing that to provide one special supervisor for each fifty white elementary teachers would call for about two such officers in each county at a cost, for salary and expense, of about \$4,200. This would be about 3.8 per cent of the average total cost for maintenance of rural education in Virginia counties.

A program calling for the addition of, say, ten supervisors each year in the State would be reasonable and apparently feasible. At this rate it would take about seventeen years to provide the special supervision suggested.

2. As rapidly as possible the unfit in all phases of school work should be eliminated.

a. If the 103 teachers visited may be considered as typical there are about eight or nine per cent of teachers doing such poor work that they should not be retained—certainly not unless they are willing and able to profit by supervision.

b. It is often true that the unfit cannot be eliminated until better salaries are paid in some counties. The good teachers will go elsewhere. Gradual improvement in salaries should be made.

c. The State Board of Education is to be commended for its policy of gradually raising the standards of certification. As rapidly as possible these standards should make the minimum training for entrance to the teaching profession the equivalent of two years of normal school education.

d. Citizens may help by refraining from bringing pressure to bear upon superintendents and board members for the appointment of friends and relatives as teachers. While the home teacher should not be discriminated against merely because her parents live in the district or county, a large proportion of such persons is not stimulating to the school system.

3. Additional training is to be desired by some members among all groups of school workers.

a. Special effort should be made to get larger numbers of teachers into summer schools. In some cases, reappointment may be made to depend upon such additional training, and in others it may be feasible and desirable to stimulate attendance through providing allowance for expense.

b. Correspondence courses may also be helpful if wisely planned and directed.

c. To give immediate help in supervision, the State department may hold regional conferences for groups of superintendents, supervisors and principals. These conferences should be organized so far as possible around actual supervisory problems.

d. To help in this and other work at least one additional member of the rural education division of the State department is imperatively needed. It is likely that one or more others should be added later.

4. Improvement should be made in certain aspects of the county superintendency.

a. While the rural superintendents have as a group good training, there are some who have had relatively little training. Most superintendents should supplement their professional training, especially in the technical aspects of school administration.

b. This training may be provided by allowing superintendents to attend summer school without loss of salary.

c. The median salary of rural superintendents is \$2,277; this must be increased or else the rural areas will lose the leaders. It is good economy to have high class educational leadership.

d. County superintendents should have a reasonable allowance for travel and office expense. It would be better if, instead of making a flat allowance, as is generally done at present, an item for this purpose were put into the budget and handled as are other items.

e. A clerk in the office to perform routine duties would in most counties be good economy, since it would relieve the superintendent for more constructive professional work.

5. Certain reorganizations are to be desired.

a. The problem of retarded children is serious and it is recommended that an intensive study be made by the State department in a typical county to propose feasible methods for caring for this group.

b. Consolidation should be continued as rapidly as funds permit providing that careful study is made beforehand as to the probable results of consolidation in a particular area.

c. The principalship should be developed more than it is in some counties. If the principal is made the head of his school, he is stimulated to grow, and it is less likely that the community will feel undue restrictions because of county policies.

d. The separate district should be permitted but its establishment should depend upon other factors than mere size of population. By giving the State Board authority to establish such a district upon the recommendation of the county board, weight may be given to such factors as the willingness and ability of the proposed separate district to maintain superior schools, to offer high school facilities at cost to children of the county, etc.

e. The district tax should be discontinued in favor of a county tax in order that higher standards may be maintained.

6. A more vital curriculum is needed. The traditional subjects are not sufficient to prepare children for this modern world so that new subjects, topics, and activities should be introduced.
7. A more alert public interest is needed in Virginia.
 - a. Popular election, by throwing responsibility upon the people themselves, would in time have beneficial influence.
 - b. A large proportion of younger men should be placed on the county boards of education. A larger proportion of women members should also be beneficial.
 - c. There should be representation on the county board from a larger number of social and economic groups than is now the case in a few counties.
 - d. School officers should make it a point to explain school policies and modern educational ideals to the public more generally than is now done. Superintendents, principals, and teachers should aid in this important work of educational leadership.
8. Better physical conditions are needed in most counties—better equipment, apparatus, supplies, and buildings.
9. Gradually more funds should be put into rural education so that in time the present discrepancy between facilities in country and city will be greatly reduced.
 - a. A minimum county tax will help to bring up standards in many counties. It is proposed that each county be required to levy a tax that will raise for each full time teacher employed a sum equal to the average raised from local sources in all counties of the State during the preceding year.
 - b. Funds for stimulating standardized schools should be continued and supplemented as conditions warrant.
 - c. The present State fund could be made to accomplish much more educationally if it were distributed on such bases as would recognize the financial needs of the different counties.
 - d. As the wealth of the State increases and interest in education develops, the size of the State funds should be increased. These funds will then enable the various counties to pay better salaries, improve buildings, consolidate schools, enforce the compulsory education law, and the like.

DIVISION II

Elementary Education in
the Cities

CHAPTER XIII

GENERAL IMPRESSIONS FROM THE FIELD

From the twenty-two cities in Virginia twelve, representative in both size and geographical distribution, were selected for visitation. These cities include more than three-fourths of the city population and are as follows: Bristol, Danville, Fredericksburg, Lynchburg, Newport News, Norfolk, Petersburg, Richmond, Roanoke, Staunton, Suffolk, and Winchester.

Attitudes of School Officers and Teachers

The school officers and teachers met or observed extended the most cordial cooperation in giving as much insight into the conditions and work of the schools as possible. The fine spirit of superintendents, supervisors, principals and teachers has made a striking impression. This spirit is encouraging in the highest measure and Virginia has a right to take pride in it. Whether conditions were favorable or unfavorable, every teacher seemed to be trying to do her best, and those who had an opportunity to talk seemed eager to find any possible ways for improvement. The greatest hope for progress in the elementary schools lies in the teachers who feel the urge to grow in power of teaching achievement. Many of the teachers are ready to cooperate fully in developing a larger efficiency in harmony with new standards. Indeed they are capable in many instances of leading if but given opportunity and encouragement. Many are full of enthusiasm and ambition. Many have visions of finer and better ideals of teaching, ideals that have to do with child growth and achievement rather than with merely requiring children passively to learn and recite words, words, and yet more words.

To capitalize the enthusiasms and ambitions of these vigorous young teachers by providing leadership for them and giving them responsibility for leadership is one of the most vital means of progress. Among the superintendents and principals are also those who have enthusiasms and ideals for progressive achievement. This spirit is highly commendable and encouraging.

The Physical Conditions of the Schools

Some of the school grounds and buildings are tidy, well kept and pleasing. But some of the buildings, halls and rooms were not inviting or attractive. Some buildings are old, dingy, dark, and of an antiquated architecture. The formal array of desks and seats with bare walls is not cheerful or stimulating. Rooms, buildings and grounds were occasionally found which were littered, untidy and neglected. Others were found where every effort was made by each teacher and her children working together to beautify the rooms and building to make them a cheerful, pleasant place in which to live. The conditions under which children receive their school experiences are of significant influence in forming attitudes and ideals with reference to cleanliness, order, beauty, personal responsibility and other constituent elements of character. The teachers and the children cannot determine the buildings and the rooms in which they have to work, but they can do much to make the buildings and rooms they are given pleasant and livable. The teachers whose children participate with them in helping to beautify as much as possible the rooms, buildings and grounds of their schools are to be highly commended.

Equipment

Apart from books and the few materials for written work and drawing, the elementary schools are almost without equipment in too many instances. Sand tables are frequently found in primary grades and occasionally in upper grades. Some provision is often made for a little work in paper cutting and mounting. But maps, tools and materials for the study of geography, nature, science and the practical arts are conspicuously absent in most schools. This adds emphasis to the impression, more fully pointed out in later chapters, that the work of the children is chiefly with books, words and other symbolic content rather than in experiences more natural to children and to life activities by which the formal work with words, figures and books might be connected and made meaningful and effective. Many—most—of the elementary schools show much evidence of the abstract, bookish work against which educational reformers have been protesting since the days of Comenius, or at least since the days of Pestalozzi. More realism, more first-

hand educative experience with things, requires more school equipment than is found in most of the elementary schools. That providing this equipment would be an economy in the long run may be inferred from the large percentage of failures in the schools under the present methods of bookish instruction. Instruction by the use of interesting natural experiences with things combined with an appropriate amount of related book work may reasonably be counted upon to reduce the number who fail and also of those who drop out of school during the year. All other children as well would profit by the work.

The Behavior Responses of the Children

The children in most schools seem to accept with complacency and finality the custom of self repression and conformity to the orderly study of lessons and the recitation of lessons studied. The children are "good" children. Little evidence for need of discipline was observed. Doubtless nature does at times break through the artificial conformity, but the impression of the observers is that the behavior of children is what has been traditionally rated as good. It is the conviction of the members of the survey staff that the absence of disorder and the apparent devotion of the children to their work are desirable ends, but that the means by which these are gotten are just as wrong as wrong can be. They are gotten by suppression, by depriving children of natural activity, of initiative, of taking personal responsibility, of self direction, of growth in coordinating life experiences and the related thought and appreciative elements, and of opportunities to develop judgment as to proper conduct in life situations. They are gotten by habituating children to dependence upon dictation by either the teacher or the textbook used. Let it not be forgotten that as conditions exist, an average of over nineteen per cent of all the children in the city elementary schools are failures each year, and over eleven per cent are dropped. It is not surprising that in this bookish, unnatural work many children were observed who were apathetic and listless, bored almost to melancholy, with no enthusiasm or zest for anything assigned them. A few children in each school thrive on this work, but this is no adequate reason for imposing it upon the larger number who can do it only indifferently well or who fail in it. Even those who thrive under it develop knowledge beyond experience and thus are lacking in balance relative to the real world of life activities.

Crowding Rooms or Exploiting Teachers

In some city elementary schoolrooms there are an excessive number of children for one teacher. In a number of schools it was found that over-crowding had been avoided by half-day sessions, dividing the large classes each into two, the one coming in the forenoon, the other in the afternoon, the same teacher taking both groups. In at least one city this results in certain teachers working for eight hours daily. In the last period of the day neither children or teacher are in a condition satisfactory for very efficient work. The teacher is given additional pay for the longer day which is less expensive for the school than employing an additional teacher, but whether it is a real economy is very doubtful.

In reply to an inquiry sent out, data received from sixteen cities show that there are this year 9,977 children on part time or half day sessions in these cities. The number of rooms in these cities with an excessive number of pupils is reported as 240. To provide a seat for every child and full-day sessions for all would require, as stated by these reports, one hundred and forty-one additional rooms and fifty-nine additional teachers. These conditions reveal a need for additional schoolrooms and teachers that cannot be neglected without doing a serious injustice to many children, and to a considerable number of teachers as well. Neither children nor teachers can do efficient work under these conditions of part time or crowded classrooms. The high percentage of failures among the children and the large number of children dropped suggest that continuing these conditions is not economy but quite the reverse. The average cost per child per year in the city elementary schools is over thirty dollars. Every additional year a child spends in school through failure or other causes of retardation represents an outlay of money and a wasteful and harmful misuse of the child's time and abilities.

CHAPTER XIV

AGE AND CLASSIFICATION OF PUPILS

Over Age Among Pupils

In Division VIII, a detailed treatment is presented of pupil accounting, including age and grade distribution of pupils. Here it will be pertinent only to point the outstanding facts and bearings of age-grade distributions as they affect the conditions and problems of instruction and costs in the city elementary schools. From page 115 of the report of the Superintendent of Public Instruction for 1925-26, Table 21, giving grade distribution of white children in city schools, is presented to show the facts.

Grade	Under	Normal	Over
1		85.4	14.6
2	10.6	69.8	19.5
3	9.9	65.0	25.1
4	10.8	57.8	31.4
5	9.6	56.1	34.3
6	10.2	54.4	35.4
7	13.1	54.1	32.8
8	12.8	52.6	34.6
All Grades			
Total	9.0	63.3	27.7

Figure 9.—Showing the percentage of under age, normal and over age pupils in each grade, and for all of the elementary grades in the city schools for white children, allowing two years for normality.

To make the import of this matter of over age more significant in showing the seriousness of the problem of retardation in the elementary schools, Table 22 has been made from Table 21. From this table it will be seen that there are 6,535 pupils, or nine per cent, under age; 45,885, or 63.3 per cent, of normal age;

and 20,063, or 27.7 per cent, over age. Especially noteworthy here is the large number of children that are from two or three to seven or eight years over age. By adding the total number of years of under age of each child who is of less than normal age we get a total of 6,902 years of underageness, and by adding in the same way we find a total of 35,637 years of overageness. The average cost per pupil in elementary schools in Virginia for 1925-26 was \$32.00. If we deduct the years of underageness from those of overageness to get a balance, we have 28,735 years of overageness representing the net of instruction years for over age pupils which must be paid for. Of course, some of this overageness may be made up by individual pupils, and, since the over age pupils are in the same classes with others, in most cases the cost is not \$32.00 per year of overageness. Nevertheless, making any deduction that is reasonable, these 20,063 over age pupils represent a cost of instruction over that of children who progress at a normal rate that is enormous. It is shown by the table that 9,579 children are two or more years over age, while 4,016 are retarded three years or more. A graphical representation of the age distribution of pupils by grades produces a more vivid impression than the tables. Figure 9 on page 121 is such a representation.

Clearly a form of classification and materials and methods of instruction which will reduce this condition of retardation is of paramount importance as a problem of economy in cost, of efficiency in instruction, and of justice to the pupils themselves. The need is forcibly revealed for questioning the curriculum, the methods of teaching and the classification of pupils, all of which are certainly responsible in some very substantial degree for this serious condition.

Classification of Pupils

In most of the schools pupils are classified into three groups for each grade, making A, B and C sections, each with its own teacher where conditions will permit. In the smaller cities, however, the limited number of classrooms and teachers will not permit of this classification for all grades. The groupings are usually made by the combined use of intelligence tests, achievement records in the formal subjects, and teachers' judgments. The work in classification seems to be well done to the degree that it brings together in homogeneous groups those having like capacity for the abstract type of thinking. Those highest in this form of ability make up the A group, those median in such ability the B group, and those of least ability of this type the C group. But this does not take into account to any great degree the elements of physical maturity or social age, and it quite disregards other forms of native ability that are of importance.

What is done to adapt the school work to the needs of the respective groups? Almost nothing was found except to require less in amount of work from the B and C groups than from the A classes. In *kind*, the work is practically the same. The courses of study are adjusted to meet the capabilities of children somewhat brighter than the average rather than to the capabilities of average children. The A groups, or the more abstract-minded children in classes not divided into the three groups get on fairly well and most of them are normally promoted or advance even faster than the normal rate, as is shown by the nine per cent of under age pupils. But the others fall behind. The work is not adapted to their capabilities. Adaptation is needed in *kind* as well as amount. There is abundant evidence that there is need of a curriculum rebuilt upon the basis of the present social, economic, industrial, civic and recreational needs of children who are "normal," and that, parallel with this, there are needs for adapted curricula, constructed for those who are respectively more able and less able to do formal work, which will provide in both kind and amount the materials best adjusted to their capabilities and social requirements. Then, and only then, can we say that we are providing equal opportunities for all children. There is no fallacy greater in education than that the *same* opportunities are *equal* opportunities. More will be said of this question in the chapter on the curriculum. We have here shown the facts of pupil retardation, pointed the high cost of retardation in money, implied the tragedy they represent in child life, and indicated that classifying children into intellectually homogeneous groups does not alone solve the problem.

Special Classes

In several cities, classes have been established for children who are mentally subnormal or physically defective. In addition to classes for the mentally subnormal, the larger cities have open air classes, classes for the deaf, and sight saving classes. The specific needs of these respective groups have been well considered and the work is commendable. There is still a tendency to demand more of the traditional formal work that can be assimilated by many in these groups, but, on the whole, they are receiving work much better adapted to their conditions and needs than are a great many children in regular classes. There is need for more rooms and more teachers for this work in most of the cities. In nearly every city there are considerable numbers of children who do not properly belong in either the group B or C of the three-group classification.

Ungraded classes were observed in some cities for pupils who are not subnormal but who, for some reason, are below their own grade but in advance of the preceding grade. These classes, by emphasis upon the individual needs of pupils, often bring them up to grade in a few weeks or months and turn them back into their own classes, thus preventing failure and retardation. This work is to be commended and encouraged.

Need for Educational and Vocational Guidance

In the city elementary schools there were in 1925-26, 67,410 white children and in the high schools but 20,810. For cities and counties, the numbers were respectively 334,363 and 55,976. In this same year there were in the State 57,409 children in the schools who were fourteen years or over who had not completed the sixth grade.

It is clearly evident that the elementary schools are the only schools which will be attended by the vast majority of pupils. The need is apparent for an adjustment of the work that will best fit these children to meet their life problems outside of school. Educational guidance and vocational guidance are of very great importance, and they should be made an integral part of the whole problem of the classification of pupils and of the provision for the adjustment of work to their respective needs.

CHAPTER XV

FAILURES AND LOSSES OF PUPILS

Based upon the annual report of the State Superintendent of Public Instruction for 1925-26, the computation of failures in each grade gives the following results:

Grade	1	2	3	4	5	6	7	8
Percentage of failures	18.1	13.1	13.4	17.1	15.4	16.4	17.0	17.7

This large percentage of failures, representing about one-sixth of all the children in the city schools, taken in connection with the large amount of retardation shown in the foregoing chapter, indicates an inefficiency in the school work that can only be regarded as serious. Operating in the system are factors which are responsible for these poor results. Short school terms, irregular attendance, a curriculum not adjusted to the capabilities of children, poor health of pupils, and poor teaching are all possible factors. Probably all do operate to some degree in some instances. But, in the cities generally, the terms are not short. Attendance is not sufficiently irregular to account for so many failures. An exceptional number of children are not in poor health. A poor curriculum and poor teaching are left as possible dominant causes.

One bit of evidence that the curriculum is defective in its organization as to sequence appears from an analysis of failures for all elementary school children, white and colored, city and country. The graphical representation of failures for these respective grades in all elementary schools, as seen in Figure 11, shows the operation of some constant factor accounting for the marked parallelism of the curves. Note that from the high percentage of failures in all groups in the first grade there is a big drop in second, little change in third, but a very sharp rise in fourth. Then comes a fall in all groups in the fifth grade with rises in sixth and seventh grades.

This parallelism is not accidental. The only factor that seems sufficiently constant to account for the uniform responses of the four groups is the common curriculum basic for all. A few cities use an independent curriculum, yet, even in these, the State courses of study are supplemented rather than supplanted. The materials of the curriculum seem to be less well adjusted to the abilities of children in some grades than in others. For all children the work is especially difficult in the fourth grade.

The Percentages of Failures in the Respective Elementary School Grades in City and County Schools for White and Colored Children

Textbooks might be poor, but if the courses of study and the teaching were both good they should overcome the weaknesses of textbooks to a considerable degree. For the very unequal percentages of failures in the different grades it seems most probable that the curriculum is most at fault, since there is not much reason to believe that the quality of teaching differs uniformly in different grades to the degree indicated by the curves.

Investment to Prevent Failures

In the preceding chapter were noted the large number of over age pupils and the enormous cost which their additional years of instruction represents. Another line of inquiry relating to the distribution of failures among cities indicates possibilities of so investing money in education as to reduce the number of failures. An array has been made of the cost of instruction per elementary school pupil in each of eighteen cities for 1925-26 and of the percentage of failures in these respective cities for that school year. From these arrays are taken the highest five cities in per pupil expenditure, the lowest five, and the five most nearly representing median expenditure. The average cost per pupil for each group of five cities has been computed, and likewise the average percentage of failures for each respective group. Graphically the results are shown here in the Figure following. Group I represents the

averages for the five cities highest in per pupil expenditures, Group II the five median in expenditure, and Group III the five lowest in expenditure.

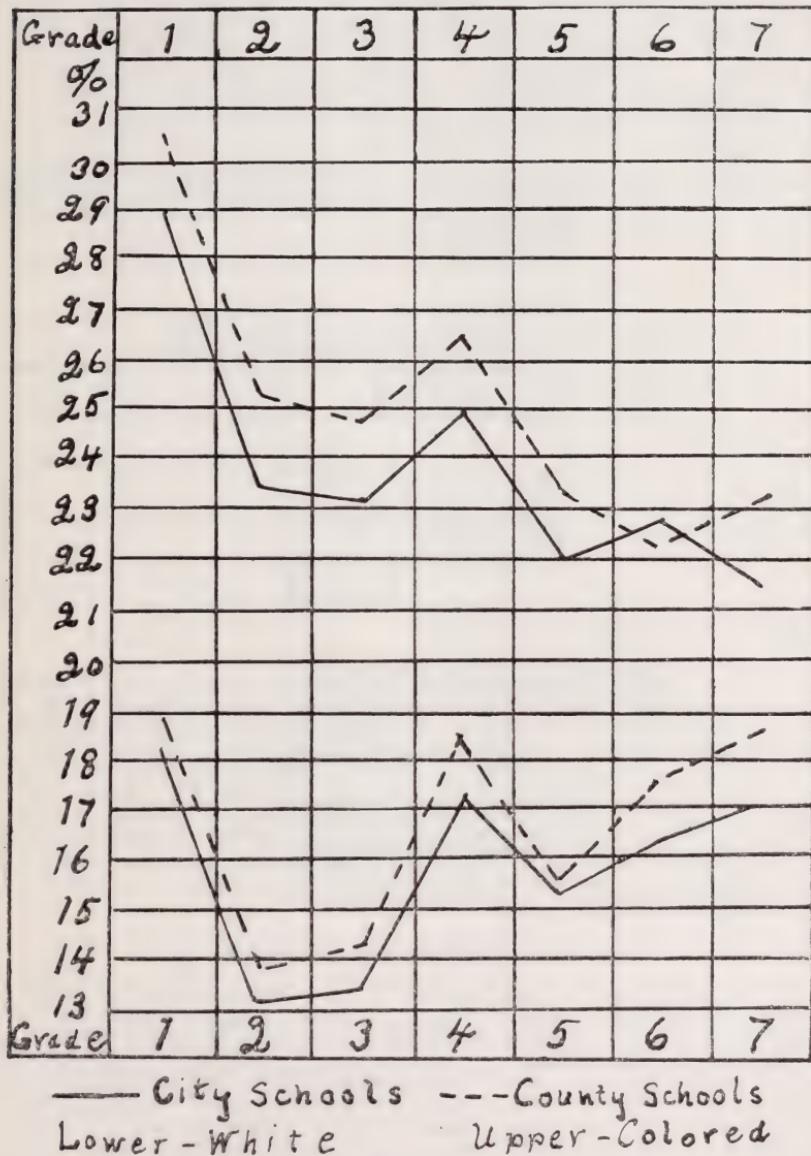


Figure 10

These results show that, as a general tendency, the cities that spend the most money per pupil for education have the fewest failures, and that those spending the least have the most failures. Of course, it is readily admitted that there are other factors operative than costs per pupil, and that some cities are an exception to the generalization. Nevertheless, that, in general, increased investment—providing more favorable conditions, more varieties

of adjustment to the individual needs of children and more supervisory aid for teachers—constitutes a means of reducing the percentage of failures seems to be a conclusion warranted by the facts. If all of the advantages represented by increased expenditure in terms of enriched offerings, provision for special classes, teachers enough to avoid crowding of classes, and greater attention to the needs of individual pupils are taken into account, there is not the slightest doubt that the higher cost per pupil would be amply justified. It is educationally and socially worth a great deal to prevent children from learn-

Group I

Average cost per Pupil....

\$44.88

Percentage of Failures....

12.6

Group II

Average cost per Pupil....

\$30.58

Percentage of Failures....

15.0

Group III

Average cost per Pupil....

\$23.10

Percentage of Failures....

17.8

Figure 11.—Showing average cost per pupil and average percentage of failures in each of three groups of five cities.

ing to fail and developing an attitude of inferiority and incompetence. Whatever it may cost to classify children into appropriate teaching groups, to adjust the work of each group to its capabilities for successful work and progress, and to provide adequate numbers of teachers trained to teach them efficiently is, in the long run, a sound and conservative investment. Turning out children with the habit and attitude of failure, with no capacities developed for efficient use in economic and social life means low earning capacity and low standards of home, community and civic life in the men and women they become as the years go by. What the economic, social and civic life of Virginia is to be in the thirties and forties of the growing century will be determined by the quality of the education of the children now in the schools.

Losses of Children from the schools

Reports are made of the numbers of children "dropped" from each grade of the schools for each year. In 1925-26, for all of the cities taken together, these dropped pupils number from 689 to 1,490 to a grade, totalling 6,852 for the first eight grades. For the same grades in the counties, the number dropped is 52,396. This is for white children only. What becomes of these nearly 60,000 children? Some, of course, move to other communities and enter other schools. But account is lost of very, very many. Inquiry about the matter brought the frequent reply that it was not known what became of the majority of the dropped pupils. In the same report from which the foregoing figures are taken it is stated that there were 6,081 white children in the State between the ages of ten and twenty who could neither read nor write. Certainly the situation reveals a need for more efficient child accounting than is now provided to prevent the growing up of an army of uneducated young people of low earning capacity and low standards of economic and social life. Division VIII of this report, dealing with the problems

of pupil accounting, compulsory education and school records should be read in connection with this chapter. Unless something is done to remedy the situation represented by the numbers of pupils failed in the schools and dropped by the schools, these thousands of children with little or no education, and with attitudes more or less unsocial or even antisocial will become a menace to the development of the Virginia which all citizens of vision have for the State.

That the present curriculum and the methods of teaching have much to do with these problems of failure and loss is the conviction of the survey staff. Other conditions apart from the materials and methods of instruction do have a place in accounting fully for the situation. But the great central factor in the whole problem lies in the degree to which the school work itself is adapted to the capabilities, interests and needs of the pupils. In the last analysis, the holding power of the schools and the promotion of growth in the pupils lie in the appreciable worth of the work they are doing.

Investment to Prevent Losses of Pupil

Again there seems to be a relationship between the money cost of education and the results obtained in holding pupils. Taking the same three groups of five cities each, considered in the section immediately preceding the last, there is much the same story as for failures—the more spent for education per pupil the fewer the losses, the less spent the greater the losses. The following figure indicates these relationships:

Group I

Average cost per Pupil....

\$44.88

Percentage Dropped.....

8.2

Group II

Average cost per Pupil....

\$30.58

Percentage Dropped.....

10.2

Group III

Average cost per Pupil....

\$23.10

Percentage Dropped.....

14.7

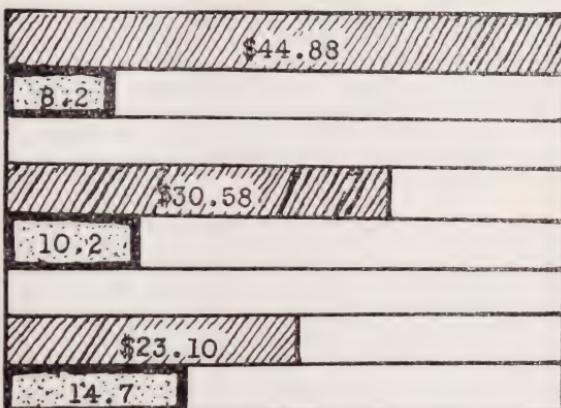


Figure 12.—Showing average cost per pupil and average percentage of pupils dropped in each of three groups of five cities.

Good financial support for the schools is an investment from which results in greater holding power and a greater proportion of promotions may be reasonably expected. More money means the possibility of more efficiently adapting the work to the needs of individual pupils and groups of pupils with like needs.

CHAPTER XVI

SUPERVISION

General Supervisors

Nearly all supervision that is general is provided by superintendents and principals. An inquiry replied to by sixteen superintendents gave the information that in four cities there were general supervisors and in twelve there were none. One superintendent stated that general supervisors were formerly employed but that their positions had been discontinued for want of funds. Another replied that it was hard enough to get money for a sufficient number of teachers to say nothing of supervisors. Yet another stated, "we have no general supervisors, but they are badly needed." That help in supervision is needed was the general judgment expressed by superintendents, by many principals and by some teachers. To find time for much supervision of instruction by superintendents and principals is regarded as very difficult by these officers with all of their administrative and clerical duties. An occasional officer is found who, despite his other duties, finds time to help teachers with their problems of instruction. Without doubt, there is great need of much more supervision of the general as distinguished from the special type.

Not all superintendents and principals are prepared to do supervisory work. This function is so important that the qualifications required for superintendents and principals should include preparation for supervision. The city superintendent who goes into the position from the high school principalship frequently has had no teaching experience in the elementary school and no direct contact with it since his own school days. The certification of superintendents and principals should safeguard this important function of supervision by requiring training and experience appropriate for it. In Division V, dealing with certification, provision is made for this safeguard and its recommendations should be followed. Specific studies in several States indicate that supervision is profitable. The continued employment of general supervisors in most of the cities in many of the States bears testimony to the belief that it is a sound investment.

Special Supervisors

Of the cities, six report no special supervisors while the remaining cities report thirty-three—eleven of music, ten of physical education, seven of drawing or art, three of writing and two of health. Most of these supervisors are justifying their employment. Whether, however, all are using their time and efforts to the best interests of the schools in the long run may be questioned. The chief duty of the supervisor is in helping teachers to become so efficient in their work that very little supervision will be necessary. Their work should be in helping teachers to learn to teach the subjects for themselves. Regular teachers could and should be prepared to teach writing, physical education and the practical arts of such kinds and in such degrees as are appropriate for elementary schools. Every effort should be made to urge upon the teachers' colleges and normal schools the importance of giving all prospective elementary school teachers adequate education and training for teaching these subjects, not as specialties, but as integral parts of a common education. For music there may be a little more justification for special teachers or supervisors, since some regular teachers are deficient in ear or voice to such a degree as to handicap them for teaching music. But, in the elementary school generally, if the purposes and the content selected are appropriate for the needs of elementary school children, no highly specialized talent or training is required. Where there are special teachers and supervisors they tend to teach their subjects rather than to teach children. The emphasis is often in the wrong place and the work is very likely to be isolated and over technical.

If a choice must be made between general supervisors and supervisors of special subjects, there is much to favor the selection of well equipped general supervisors who can help teachers with the work of all of the subjects taught. Where both can be provided, the two should cooperate thoroughly to balance the school work and coordinate fully the interrelated parts of the whole program.

CHAPTER XVII

THE CURRICULUM

The Time Allotment of Subjects

A first consideration in noting the content of the curriculum is the list of subjects and the time given to each. The time distributions for the full school day have been reported for sixteen cities. The total time allotment for each subject through the grades has been averaged for these cities in minutes per week and in percentage of the entire school time. The results of this summary are shown in Table 23. This table shows the practical relative estimates of the several subjects as measured by the time provided for them. One cannot fail to be impressed by the very large proportion of the time given to the instrumental or tool subjects—the language, arts and arithmetic. Nor can one avoid observing how relatively little time is given to the subjects representing thought content, the use of imagination, and opportunity for considering questions relative to life's problems requiring knowledge, judgment and appreciations of worth—history and civics, geography, science and the industrial and home arts. By contrasting the formal or tool subjects with the content subjects in separate lists, we see the full significance of this difference in emphasis. The following subjects with percentages of time allotment are worthy of consideration:

Percentage of Time	Percentage of Time
Reading	16.4
Arithmetic	12.4
Language	10.2
Spelling	5.6
Penmanship	4.9
	<hr/>
Totals	49.5
	17.4

To the formal subjects is given 49.5 per cent, or almost exactly one-half of the time while to the content subjects is given but 17.4 per cent or less than one-fifth. Spelling receives almost as much time as history and civics, and penmanship more time than nature study or science and nearly as much as geography. In 1904, as shown by a study published by the National Education Association in 1924, "Keeping Pace with the Changing Curriculum," spelling and penmanship each received 4.4 per cent of the total elementary school time. Despite the reduction of the spelling lists from those of over twenty years ago and the improvement in methods of teaching developed since that time in both spelling and penmanship, the city schools of Virginia are today devoting more time to both subjects than the city schools of the country in general devoted to them in 1904. In 1904 the time allotted to industrial arts by the same city schools was 2.2 per cent and to nature study or science 3.7 per cent. Today the time given to these subjects in Virginia is not up to the allotments of over twenty years ago, despite the fact that we think of this as an industrial age and recognize that it is a period in which every phase of our lives is increasingly dependent upon science and influenced by it. With all of the developments brought about by the world war and our growing world-wide relationships; and with all of our emphasis upon the importance of a more intelligent and efficient citizenship, the city elementary schools give less than one per cent more time to geography, history and civics combined than to arithmetic.

How can we expect children to develop ability to think upon matters of everyday need and importance, to develop powers of practical judgment, to cultivate moral ideals and to establish habits of intelligent and efficient thought and action without providing adequate time, materials and experiences for the growth of these qualities? Is not this very distribution of time among the school subjects the revelation of a need for a thoroughgoing inquiry of what is really meant by education and how education is to be developed?

The Curriculum Content in General

In common with many other curricula, the State courses of study have resulted in a graduation of amounts and kinds of work much better adapted to the capabilities of children of more than average ability of the purely intellectual type than to others. Its stress is upon the mastery of the conventional arts, of the outstanding facts of geography, history and civics, of the knowledge of personal hygiene and the related health habits, and of the simpler phases of music and art. These are worthy purposes, but they seem to be so emphasized as to crowd out other purposes that are quite as important. There are other values of fundamental importance. When emphasis is persistently placed upon the mere learning of facts and the forming of the specific habits making up the language, arts and arithmetic, there is little place left for the cultivation of the imagination; for the development of initiative, inventiveness and other creative capacities; for training in forming judgments, making choices and acting upon decisions; for individual and group planning and cooperative acting; or for developing powers of independent self direction and self reliance. These are the qualities and the activities out of which life itself is made. The habits and facts of the formal subjects are but tools or instruments, of no value in themselves and only serviceable in the measure that they are used in promoting the activities which make up life. We ask our schools to make moral character. Moral character is developed by the active use of one's powers in doing the things that constitute the real problems of life under the direction of intelligence and a sense of worth. Merely learning the processes and facts of the formal subjects has little to do with the matter. It is how these are learned and used and the attitudes and ideals developed in their learning and use that count in education for character and efficiency.

To be sure, the State courses of study do mention the importance of these qualities. But actually in the work, they are not adequately provided for. As taught in the schools, these values are often totally lost sight of. School activity becomes chiefly, in many schools, learning the facts and processes found in textbooks and reciting them. In just as far as possible, the curriculum should provide materials and forms of organization of work that will practically force teachers to do more than require mechanical learning if they follow the courses. The present courses of study contain much fine material, but, in the light of the present practice in many good schools, they can be greatly improved.

A few cities have courses of study of their own in which some improvements have been made upon the State courses. A few other cities have prepared materials supplementary to the State courses, resulting in some degree of improvement. All such local adaptations of constructive undertakings are to be commended as they are wholesome for teachers and others who participate in the work as well as for the children for whom they are made. The great need in curriculum revision is that of placing altogether more emphasis upon the practical, social, civic, recreational and aesthetic phases of life, developing the formal subjects much more largely in relation to the situations out of which needs for them arise and the needs which their uses serve.

Reading

It is doubtful whether the use of reading textbooks as such provide the most useful material for the middle and upper grades. The use of such texts tends to overemphasize the mechanics of reading at the expense of content and the cultivation of interests and tastes. If each child is provided with a book different from all of the others in his grade and the pupils exchange books as read, each pupil will have opportunity to get acquainted with much more material than if all read the same one

book. A wider interest, a more extended basis for the cultivation of taste and a greater efficiency from reading a larger quantity of good material are the advantages of the plan of individual reading. A common book to be used for needed instruction common to the class may also be provided, but not used as a means by which the children bore each other as they commonly do in most formal reading periods.

From the time allotments, it is seen that geography, history, science and industrial arts receive but meager allowance. As a part of the reading content, excellent books and magazine articles from these several fields might well be selected. Learning what to read that is interesting and profitable, cultivating a taste for good reading and developing reading habits and a favorable attitude toward the use of the library are no less important than mastering the mechanics of reading.

Arithmetic

The work in arithmetic provides adequately for the learning of facts and processes, but not for developing the *use* of its materials in the problems of daily life. In addition to teaching the techniques, arithmetic should teach the measurements and economics of every day life—it should be a means of helping in buying and selling, developing thrift, acquainting us with the intrinsic and money values of food, clothing, furnishings and other material necessities, of counting the values and the costs of road building, water supply, community upkeep, education, recreation, of methods of investment, saving, insurance, and the like—in short, a study of all of the kinds of daily life problems about us in which the use of number is essential. Much more use should be made of these kinds of daily life situations in introducing new phases of arithmetic study so that their meaning and worth are at once understood and appreciated. If there were an adequate course in industrial arts—a study of food, clothing, shelter, utensils and the like from the standpoint of the consumer and citizen—it would furnish the basis and the motivation for much of the appropriate arithmetic. In a few schools, these relationships do receive some attention, but, on the whole, the work is chiefly learning the bare facts and processes apart from considerations of their value or use. Altogether too much of the work is in textbooks.

Language

The language work, like the arithmetic, is over formal and too much isolated from the common needs of speaking and writing. Every subject is a language subject. If constant attention to making whatever is said or written in geography, history and other subjects clear and effective, there will be relatively little need for many lessons in separate, formal language. Correct and clear English is a matter of habit formation. A language book should be used more as a reference than as a text. Children should early be taught to go to a language book for help as they go to a dictionary for aid. What children most need is help in thinking clearly and in expressing the results of their thinking so that they convey the exact meanings which they have in mind. Helpful guidance in all of their efforts to express themselves with accuracy and elegance will most improve their language.

Physical Education and Health

The work in physical education and health is well provided for in the course of study together with the recently developed supplementary material in this field. Caution may be needed against the overemphasis of formal calisthenics or setting-up exercises. In one city a class coming in from vigorous out-of-door play at recess was immediately given a regular period of calisthenic exercises, as observed by a member of the survey staff. Even if this were the only time the work could be included on the program of the

instructor, would it not be better to sacrifice the program than the children? Why should not the regular teacher be prepared to give these simple exercises, adjusting the time to the need?

Geography

The geography is generally very "bookish" as taught. The course of study includes suggestions for making it more vital in its relationships to community and world activities, but a formulation yet more inclusive of problems and opportunities for active investigation on the part of the pupils is desirable. Much more use should be made of current periodicals containing matter on transportation, trade and travel, and of supplementary books on travel and the industrial-social lives of other peoples as affected by geographic controls. Much more study is also desirable of the geographical conditions, controls and responses of the children's own environment, in upper grades as well as lower. Collections and illustrative constructions or sand-table representations were rarely found in the schools.

History and Civics

Much reading to secure more vivid pictures of periods and events studied and to develop general interests in history is more effective than the intensive study of a small amount of textual material with children. Constructing illustrative historic situations, making costumes, implements, vehicles and the like, and dramatizations are helpful methods of developing interests in history. The course of study might well emphasize these phases of the work more strongly, encouraging more reading, but less intensive than that required to master a textbook. As already suggested, some of the time allotted to reading might be given to the reading of history. Excellent books are plentiful.

The community and civic studies included are good as far as they go. The chief criticism of the citizenship work is that it is more *about* citizenship than a participation in its activities. More attention to the development in children of habits of self-direction, cooperation and self-control is highly desirable. In general, not very much participation is found in organizations and in cooperative school and neighborhood enterprises. In many schools the children seem to be regarded as *subjects* rather than as *citizens*. As Professor Dewey says, "The only way to prepare for social life is to engage in social life." In a few schools, the pupils do have opportunity to initiate enterprises, to plan, to organize, to cooperate, to take responsibility, to develop leadership and fellowship and to learn self-direction and self-control. The course of study should more fully encourage this type of citizenship training.

Spelling

No criticism of the course in spelling as offered is made except that more emphasis be placed upon learning the spelling of words needed in other studies as these needs arise. Some of the time given to spelling as a formal subject might profitably be used for other subjects of greater importance for most pupils.

Penmanship

The course in penmanship has included with it a great array of physical activity that psychologists generally regard as having nothing to do with writing. The many hours spent in the seven years of the elementary schools in making ovals, "pushing and pulling" and so on seem to be wasted. In referring to this problem in his "Principles of Teaching," Professor Thorndike says: "It is risky to put things together in ways in which they will never have to go together." Much of the work connected with teaching children to write seems to be in violation of nearly every principle of psychology

known relative to motor training. One or two school systems using radically different methods and much less time seem to produce results just as good as the schools using the highly specialized techniques. In some grades time might well be saved for some other subjects from the allotment to penmanship.

Twenty-five samples of written work selected at random from seventh-grade pupils near the close of October from each of two school systems, A and B, were scored by three judges who knew nothing of the origin of the papers, or that they were from two different school systems. The papers were taken from work in English and no reference was made to penmanship in asking for the papers.

The average scores of the three judges using the Thorndike scale were:

City A—Following no system of Penmanship.....	11.1
City B—Following rigidly the Locker System.....	10.3

Both are up to the "usual" seventh grade score, which is 10.5 by the Thorndike scale.

The time which was given to penmanship in City A was 495 minutes a week for the first six grades until three years ago, when penmanship as a programmed study was dropped in the first three grades, giving 270 minutes for grades four to six, inclusive. City B gives 525 minutes per week for the first six grades. For the present seventh grades, the time devoted to penmanship has, therefore, been respectively 495 and 525 minutes per week. City B, with the Locker system, has averaged 30 minutes per week more time, and scored lower on the random sampling. Of course, this small number of samples cannot be offered as proof of any superiority of one situation over the other. But it does suggest the need of a genuine survey of the matter. If City A can teach penmanship with no specific time in the primary grades and but 270 minutes a week in intermediate grades that scores as high as other cities giving from 75 to 100 minutes a week to it in each of the six grades, it is worth while to save the time, and to understand the methods of City A. Samples from City A show much more individuality than those from City B without any sacrifice of legibility.

Music

The course in music is well outlined, though very briefly. In practice, rather more attention is given to technique than is apparently intended by the State course. This is perhaps partly due to the difficulty in securing adequate materials for the appreciative forms of study which should have more attention.

Fine, Industrial, and Household Arts

The State course of study includes specific work in these fields for the rural schools only, and in these for the upper grades only. As outlined, the industrial and household arts work is good as far as it goes, but it tends to neglect somewhat the thought or content side. There is very little of fine arts work included. Some of the city schools have supplementary courses in fine and industrial arts, and household arts for upper grade girls. These courses also tend to emphasize the manipulative or hand-work phases and to neglect or ignore the thought side.

That the whole range of school work is so formal and bookish is partly due to the neglect of the industrial arts in the inclusive sense in which that term is coming to be used. This is not the old handwork or manual training conception, but an organization of studies of food, clothing, shelter, utensils and other material supplies used in daily life, considered from the standpoint of the needs of the consumer and citizen. It presents these in forms adapted to the capabilities and interests of children in each of the respective grades with reference to health values, economic

values, art values and social values. It uses investigation and experimentation calling for a study of the environment in a first-hand way. It connects directly with geography, history and arithmetic, furnishing points of contact and avenues of approach to the problems of these fields. It includes the art problems of the selection and use of clothing, furnishings, utensils and other material supplies, helping to cultivate taste and a love of the beautiful in the common things which determine the art quality of our surroundings. Supplementary to it is a study of the masterpieces of painting, sculpture and architecture so that we may know and appreciate something of the meaning and beauty of these.

Recalling the very large number of children who drop out of school, who fail, and who are over age, it would seem the part of both wisdom and fairness to consider with seriousness the importance of a field which would go far to adapt the work of the schools to the capabilities and interests of the majority of the pupils. Either as a separate study or developed in connection with other studies, the work represents material of fundamental worth for all children. It is not vocational education, but a part of the education of the consumer and citizen, having common values for all.

Nature Study and Science

As was indicated in discussing time allotments, science has very little attention. Most of what has been said of industrial arts and its relationship to life applies equally to science. Time and appropriate material should be provided for work in the science of every-day life sufficient to make children intelligent regarding the natural phenomena and forces all about them and to stimulate and cultivate in them interests and attitudes favorable to further study.

The Factor Most Needed in Curriculum Revision

The great weakness underlying the whole curriculum is its neglect of things, problems and interests of life, and its overemphasis upon the formal and the bookish. The active, creative powers of children are given little opportunity for expression or development. A thoroughgoing revision of the curriculum with greater emphasis upon the real, the practical and the active in life, and upon the kinds of interests and activities natural to children and adapted to their capabilities is one of the basic means for improving the quality of education in both city and country schools.

CHAPTER XVIII

THE METHODS AND QUALITY OF INSTRUCTION

Observations of Instruction

Certain general conclusions reached after the observation of lessons or parts of lessons in over 240 classrooms in 31 buildings in 12 cities may be stated in the following terms:

The spirit of teachers and the relationships of pupils and teachers were from very good to excellent. Pupil participation and responsibility relative to order and spirit were more often only good, fair or poor. The teacher more commonly seemed to carry all responsibility and the pupils passively to accept the situation.

Note was made of the degree in which pupils were conscious of the worth of the work they were doing and in which pupils shared in purposing and planning the work. In all of these points the work rated low, the teachers usually assigning work by topics, pages or specific directions, the pupils accepting the assignments as a matter of course, with no question of their purpose or worth.

Especial note was made of the extent to which use was made of environmental materials, interests and activities, and of practical interests and activities—constructive, investigative and appreciative. Very little use was found of these materials and opportunities. The best illustrations were usually found in the primary grades.

But rare examples of the use of the project method were observed. Most lessons were topical in character and were based directly upon textual material. Few teachers were found who centered their teaching upon problems independent of textbooks, using children's own experiences. Questioning that developed good thinking and the directing of pointed class discussion were not often observed. The emphasis was chiefly upon the learning of facts and the forming of the mechanical habits of the formal subjects. The methods of work were in terms of words—more words, and yet again words and more words. Real experiences in doing and thinking, planning and cooperating, solving immediate problems or learning facts and processes in relationship to real situations, were so infrequent as to be exceptional.

The Attitudes of Teachers

This does not at all mean that teachers did not work hard and zealously. Most of them did. In personality, industry and good intent no criticism is made. Some teachers expressed themselves as having a knowledge of the values of more modern methods and a desire to use them but as handicapped by conditions which they could not overcome. Conservative attitudes of parents or of principals or superintendents were occasionally cited as obstacles to doing what teachers believe should be done. And here and there was found a teacher doing work of the finest type.

The Need for a New Conception of Education and Method

The great majority of the work, however, reveals a conception of education and method that belongs to a day that is past. The teacher-training institutions cannot escape a considerable measure of responsibility for this situation. The superintendents and principals cannot escape their share of responsibility. Among all who have responsibilities—training institutions, supervisory and administrative officials, and teachers—there is need of a new dispensation on the meaning and method of education—away from the emphasis upon the formal—the letter, which killeth, to the needs and experiences of real life and activity—the spirit, which maketh alive. It is time

to give heed to the wreckage left by the wayside in the elementary schools of city and country—the 53,000 annual failures, the 55,000 who drop out, and even yet more to the real needs of the other thousands who do conform to the requirements and standards even though many of these are not well adapted to their interests or capabilities. A more realistic, socialized type of curriculum and method would release energies and develop capacities untouched by the work as usually carried on—energies and capacities of the highest value for the economic, social and civic life of the State as well as for the pupils themselves.

The present situation offers a challenge to all concerned which they should accept seriously and with good will. The work may be upgraded many fold within the space of a very few years. Of course, the people and their representatives, the school boards, have a responsibility for improving the conditions under which instruction is carried on. Their attitude is very important and no effort should be spared to enlist their support by acquainting them with the needs, the possibilities and the values of a richer and more vital education desired for their children.

CHAPTER XIX

TEXTBOOKS

Of the survey staff, the question is asked, "Have the elementary schools the best available textbooks?" This is a difficult question, since no satisfactory system of rating textbooks has been developed. But, for the purposes, kinds of material and the methods of teaching which we believe to be most sound in education, we make the following observations as a result of seeing the present textbooks in use.

Reading

For the first grade, we believe that reading matter connected a little more closely with activities and experiences in which the children do and might profitably engage could be selected. Numerous first grade teachers stated that both they and their children found one of the primers in use annoying and deadly dull after the first few days. Its situations and materials are not sufficiently varied to hold interest and an attitude of boredom is developed. While learning to read, many children are also "learning not to read." For the books immediately following the primer and first grade, perhaps those in use will do as well as any, since many supplementary books are also used. For grades beyond the third or fourth, we doubt whether a basic text is desirable. For this we would substitute more individual reading for much of the work, having on hand a common set of books for needed practice in reading for comprehension, for speed tests and for the overcoming of general reading difficulties.

Arithmetic

More discontent was found with the arithmetic texts than with any others. The difficulties with the books as we summarize them are these: The books are lacking in the devices by which pupils check their own work; they do not provide for regular reviews; the problems in them are so interlocked that children are often confused by them; and they do not include enough material from the child environment for adequate motivation. Probably textbooks which meet these criticisms are available. Some of the supplementary arithmetics found in occasional schools are used by teachers with better results than the more generally used texts.

Language

The language textbooks are occasionally objected to as too formal and difficult. Many teachers do not know of any way to use them profitably. It is believed that texts could be found among those available which would more fully represent the kinds of work which would help pupils to form good habits of speaking and writing, connecting the language study more closely with other subjects and interests.

Geography

Examination of the textbooks in geography and observation of their use may readily result in the criticisms that they are chiefly encyclopedias of facts, and that the form and arrangement of their material are not adapted to the interests of pupils. The first book of the series particularly is not as well organized and arranged as are some other beginning texts. Its material relates to peoples, products and conditions all over the world, but it does not adequately provide for approaches which connect remote regions with the experiences of the children. Textbooks in geography making

more effective use of pupils' experiences and suggesting the use of more varied forms of activities and investigative enterprises are desirable.

History and Civics

The textbooks in these subjects provide the factual material required by the present courses of study, but there is much evidence that they are too difficult to be readily understood by the pupils in the grades to which they are respectively assigned. Texts giving the same material in simpler form could be found. Teachers often expressed a desire for more historic material in story form, giving a greater wealth of detail than the texts used and making a greater appeal to imagination and interest.

Home Economics

The home economics text is good as far as it goes, but it includes material on food and clothing only. Material should be provided on household furnishings, interior decoration, home management, child care, and family relations, adapted to the capabilities of pupils in the grades in which the work is offered.

Textbooks in Other Subjects

No specific suggestions are offered relative to other textbooks. So much depends upon the specific methods and purposes accepted that it is almost impossible to suggest appropriate textual material without considering these purposes and methods. With the aims and methods now dominant, probably the texts in these other subjects are as nearly in harmony as any available.

The General Problem of Textbooks

Underlying the whole question of textbooks is the basic consideration of the purpose they are to serve, in terms of both subject matter and teaching method. The present courses of study for which the present textbooks were selected tend very generally to neglect adequate provision for developing in children the active powers of initiative, imagination, spontaneous activity, cooperation, constructive, investigative and other creative abilities, appreciations, attitudes and ideals. They emphasize book knowledge and the habits and skills of the formal subjects. When the courses of study and the correlative methods are changed to give adequate place to the more active or dynamic factors in education, the whole matter of the selection of textbooks best adapted to serve these needs and purposes can be more effectively considered. Textbooks are very important tools to be used in instruction. Their selection is a matter of serious concern. The cost in money should never be a determining factor as between a good text and a poor one. A poor tool is a dear tool at any price.

In the State Superintendent's report for 1925-26, on page 43, it is stated that "the present list of textbooks, with possibly two exceptions, will be continued in use until June 30, 1930." Before changes come, therefore, there is time to make a thorough study of available textbooks by persons in the State who are qualified to judge of their relative merits. Such a group of committees should certainly contain on its lists a number of teachers engaged in classroom teaching—persons who can bring to bear the results of intimate experience in working with children of the grades for which texts are selected as well as the advantage of good professional training. During this interval, desirable changes may be made in the curriculum and methods of work, and such changes in texts may be made as are found necessary to bring purposes, methods and books into harmony.

Recommendations

1. The classification of children into groups as nearly homogeneous as is practically possible should be continued and extended. Caution should be used against making such classifications wholly on the basis of intelligence ratings. Physical maturity and social age, together with considerations of personal and environmental factors, should be taken into account, particularly where variation from the normal is very great.

2. Both in kind and amount, the work for all groups resulting from classifications made, should be adapted to the capabilities, interests and needs of these respective groups. Modify the work for each group to meet its own particular needs. This is not "class" education but is only providing for equality of educational opportunity. Take into account the large percentage of failures, of pupils who drop out, and of over age pupils. Plan kinds and amounts of work for each group which will enable a very high percentage of its members to pass, and present the work so that it will make a strong "holding" appeal to the interests of its members. Each group should move forward at a rate consistent with its own capabilities. The standards for promotion of one group should not be made the standards for any other group. If the work is actually adjusted to the needs of each group, every child properly classified should be promoted at the proper time if he has put forth a reasonable amount of effort, assuming that his teaching has been of good quality.

3. The courses of study should be revised to provide more adequately for the adaptation of work to the needs of the different groups of pupils. In doing this, account should be taken of the evidence in the time allotment of subjects, and the methods of teaching, that the work as a whole places undue emphasis upon the formal, literary and abstract aspects; and that it neglects the economic, industrial, scientific, aesthetic and social phases out of all proportion to their places in life and their part in giving opportunity for the growth of the capabilities of children. Classifying pupils into homogeneous groups is of little avail unless the work provided for each group is adapted to its capacities and interests.

4. Together with appropriate modifications of the courses of study to use pupils' experiences, to use environmental materials and interests, and to stimulate and direct the use of constructive, investigative and appreciative interests of pupils, students in the teacher-training institutions should be educated and trained in the methods of teaching such improved courses of study. Teachers in training and in service should be helped to learn how to conduct their work so that pupils have a consciousness of the worth of the work they are doing, so that they develop initiative, ability to set up purposes and problems for themselves, ability to plan and carry plans through, ability to make sound judgments, and so that they develop desirable attitudes, appreciations and ideals as well as factual knowledge and mechanical habits.

5. It is recommended that more general supervision be provided for the elementary schools to aid teachers in upgrading their work and increasing its efficiency. In this connection it is also recommended that the qualifications for superintendents and elementary school principals be made to include experience and other professional training which will qualify them to serve as supervisors of instruction to the full extent that their offices represent supervision.

6. Since very few textbook changes can be made before June 30, 1930, it is recommended that appropriate representative committees be appointed by the proper authorities to study the problem of textbooks in terms of such improved courses of study and methods of teaching as are in harmony with acceptable educational purposes and practices of the present day, and

to report their findings and recommendations on or before the first of January, 1930.

7. It is finally recommended that among all of the problems of the State relative to elementary education, a main purpose and problem for immediate and continued endeavor by all teachers and supervisory officers and by all teacher-training institutions should be that of adapting and improving the content and quality of instruction to meet the actual needs of all children in accordance with their respective capabilities. Improvement along these lines does not have to wait upon legislative action or the provision of more money. Every teacher may and should have a part in it. Every teacher may begin to work upon it today. Participation in improving courses of study and methods of teaching will not only yield values to the children of the schools, but it will also promote the professional growth and efficiency of every teacher who so participates. It will yield the added zest and satisfaction of creative effort which transforms routine into joyous adventure.

DIVISION III

Secondary Education for Whites

CHAPTER XX

THE HIGH SCHOOL SITUATION IN GENERAL

Universal free public secondary education in the United States has existed for less than seventy-five years. Indeed, the great high school era may be said to have had its beginnings after the Civil War and particularly as a result of the Supreme Court decision rendered in the now famous Kalamazoo case in 1874. The South, however, weakened, and impoverished by the great conflict between the States, did not, in general, give attention to this phase of education until some twenty-five or more years later than this time. In fact, the real beginnings of free secondary education in Virginia date from 1905. Then it was that, under the enthusiastic leadership of a few notable men, the present system of public high schools was inaugurated.

The ideal envisaged by these early pioneers was a noble one and must excite the admiration of any thoughtful student of education in Virginia. Nevertheless, in the light of experience, it seems now that the love of humanity and the pedagogical earnestness of these men led them greatly to overrun the limits of practical wisdom. In particular, the effort which resulted in the establishment of large numbers of little, weak, struggling high schools, situated in close proximity to each other in almost every quarter and district of the State, was most unfortunate. Not, surely, that the ideal of a high school education as the birthright for every son and daughter of Virginia was unworthy or impracticable, but that there is a better way to realize this hope than through the agencies devised twenty-two years ago. That better way has, in the estimation of the survey staff, already been found and is being put into effective operation. It is the gradual abolition of the small struggling high schools and the establishment, in lieu thereof, of well organized, well equipped, and well manned consolidated ones. The detailed treatment of this subject will be considered in a later chapter of this report.

Racial Difficulties.

The population of Virginia is 2,309,187¹. The school census of the State for the year, 1925-26, records 701,534 children of school age². These are classified as: White, 484,732; colored, 216,802. That is to say, the white children of school age constitute 69.1 per cent of the entire number, while the colored children constitute 30.9 per cent of the whole. Just what is the ratio of white children of high school age to colored children of high school age the available statistics do not reveal. It may, however, be assumed to be approximately the same as for the two groups considered collectively.

Under the operation of public sentiment and the laws resulting therefrom, white and colored children may not be educated together. Nor is there probably any good reason why they should be. Each race has its own peculiar traits, aptitudes and needs and each demands a schooling that is adjusted to these differences. Nevertheless, the necessity of providing two complete systems of public schools everywhere throughout the State complicates the educational program greatly and vastly adds to the cost thereof. In particular, especially in certain sections of the State, these racial differences among pupils seriously handicap all efforts to furnish adequate secondary training for either group.

Naturally, the racial differences to be found—and therefore the educational problems arising out of them—are much greater in certain districts than in others. The colored population is notably large in the south and southeastern portions of the State, but is relatively sparse in the western part. Elsewhere the ratio fluctuates from few to many. Thus, in illustration, Charles City county contains 75.2 per cent negroes and Sussex county 65.7 per cent negroes, while Buchanan county has so few negroes as to make the percentage virtually zero and Carroll county has under 1 per cent negroes. In twenty-two counties the negro population runs about 50 per cent, while in fourteen counties it runs under 5 per cent.³

¹Federal Census, 1920.

²Annual Report of the Superintendent of Public Instruction, Vol. IX, No. 2. October, 1926, p. 69.

³These data are furnished by Professor Wilson Gee.

While this particular division of the survey is directly concerned only with the question of secondary education for white children, it is impossible to treat the theme adequately without at least frequent casual reference to the entire racial situation. For, obviously, any attempt to furnish high school education to white children must be different from what it would otherwise be if only one type of school was to be established.

Geographical and Occupational Factors

Another set of factors which complicates the problem of secondary education in Virginia is that which relates to geographical and occupational conditions. The western portion of the State is hilly and mountainous. The eastern portion is indented by numerous bays and sounds and is traversed by many wide and deep rivers. In some sections transportation in certain directions is difficult, if not impossible. In consequence, communities have tended to become isolated one from the other. While, of course, automobiles and the State-wide good roads movement have done much to integrate all sections, it still remains true that any thoroughgoing plan for genuine school consolidation is best with many difficulties.

Furthermore, the material interests of the inhabitants are not entirely similar. In the Tidewater areas gardening, trucking, farming, fishing and shipping industries predominate. In the southern counties cotton, peanuts, and tobacco are the leading products. In the extreme southwest mining occupies the center of attention. In the northwest fruit raising is found profitable. Over much of the other portions of the State general farming and grazing are the common occupations. Essentially, therefore, Virginia is an agricultural State, approximately seventy per cent of its population residing in rural communities.¹ Indeed, there are but twenty-three incorporated cities within its boundaries, and most of these are relatively small.

Yet, despite the fact that Virginia is essentially rural and agricultural, notable discrepancies exist among the several sections. Natural resources and powers of productivity are not uniform. Immensely fertile areas are matched by excessively rugged, infertile, or even barren regions. In consequence, not only are the practical educational needs—particularly the post-elementary school needs—of the inhabitants of one section often greatly different from the needs of the inhabitants of other sections, but the ability to pay for educational advantages of any sort varies mightily from section to section.

A Varied Curriculum Needed

If there be added to the agricultural classes throughout the State the considerable numbers of merchants, traders, manufacturers, professional men, and individuals engaged in clerical and personal service, the composite constituency suggests at once the need for a composite type of education adapted to the interests of each of the distinct classes. For, certainly, the day is past when educational theorists subscribe to the doctrine that a uniform program of studies, uniformly administered, is either desirable or logical. Neither do they accept the antiquated dictum that, "It matters little what subjects a youth studies in school provided he studies them hard." Neither do they any longer give credence to the frowsy notion that "whatever training is best suited for a boy preparing to enter college is necessarily best suited for the boy who is not going to college." Indeed, present-day educational theory demands that all schooling shall be functional in its outcomes. That is to say, it demands that individual differences in pupils shall be taken as fully as possible into account and that a training shall be furnished to each one in accordance with his ability to absorb it and to react to it,—in accordance with his ability to turn it into effective use in meeting the problems of his prospective active world of work and play.

The Problem a Rural One

Considered in its total aspect, therefore, the problem of secondary education in Virginia is essentially a rural problem. In so far, of course, as particularized

¹U. S. Census Reports for 1920.

sections or communities are not rural and agricultural the educational problems will differ from those of the rural schools. But even here the same general principle of organization must be found in operation, namely: Unity with diversity, or the flexible adaptation of a general or common principle and program.

Other Conditioning Factors

There is one other set of factors greatly conditioning secondary education in Virginia. This is the concept of the word *culture*, as it applies to human beings. Historically, Virginia was the child of aristocratic parents. Its notion of the most nearly perfect man or woman was the *gentleman* or the *lady*. These expressions connoted not only gracious manners, but as essential to these, a life of leisure, freedom from the worries of a work-a-day world, and an education that concerned itself with things remote from the interests of the common man. In particular the study of foreign languages and literature, of abstract mathematics, of the histories and political systems of ancient and distant peoples, and of the speculative philosophies of many sorts—all these were regarded as essential to any true or cultural education. Not, of course, that this attitude was held solely by Virginians or that it has been abandoned completely by people in other parts of the United States. It has not. It is today frequently manifesting itself among all sorts and conditions of men. But in Virginia the idea is perhaps more firmly rooted traditionally than in some other sections of the country and must, therefore, be taken carefully into account by any group of individuals essaying a survey of the State school system. For, as a result of this deep rooted conviction or habit of thought, two very significant present day outcomes are to be observed. These are, first, the somewhat commonly accepted belief that secondary education should be designed largely, if not solely, for a highly selected group of pupils; and, second, that the best possible training that can be given this selected group is that which comes through an extended study of the classical languages and mathematics. Indeed, the ideal appears to hold that the secondary schools should concern themselves little with practical affairs of any sort—either as elements in a general education or as means to assisting certain types of individuals for their most effective social service.

The Survey Procedure

Only as professional advice of any sort is based upon accurate knowledge, carefully analyzed and interpreted, has it any claim to validity or to expertness. Consequently, in order to insure that the recommendations made by the survey staff should rest upon a strictly impartial and scientific basis, care has been taken, first of all, to ascertain the facts which are involved in the existing secondary school system of the State. To this end, use has been made of all the pertinent printed material which time and circumstances have made available; a detailed questionnaire covering certain important topics has been sent out and the returns thereon have been compiled; and conferences with numerous State school officers have been held. In addition, the special investigator for this portion of the report spent nearly four weeks in the field, studying at first hand the schools themselves. During that time he endeavored to observe typical situations in all sections of the Commonwealth, having visited forty-nine secondary schools located in nine widely distributed counties.¹ Fourteen of the forty-nine schools visited were attached to city school systems, while thirty-five of the schools were classed as county or rural high schools. In each school the investigator held conferences with the superintendent and the principal; talked with teachers and pupils; observed classroom teaching and pupil reactions thereto; took note of the material conditions of the buildings, grounds, and equipment; scrutinized school records; and in particular was observant of the general spirit, morale, and attainments of the school.

¹The counties visited are: Norfolk, Southampton, Wise, Smyth, Augusta and Rockingham. The cities visited are: Norfolk, Bristol, Roanoke, Harrisonburg, Staunton and Petersburg.

CHAPTER XXI

IDEALS AND PURPOSES

Clearly no school and no school system can rightfully be judged except in the light of its aims and objectives. It is, therefore, pertinent to inquire: What is it that the Virginia secondary schools are seeking to achieve? A second very pertinent question, of course, is: Are the avowed aims and purposes worthy ones, or do the very objectives themselves need reformulation?

The basic principles upon which Virginia's secondary schools are established are, of course, to be found in the Constitution of the Commonwealth. Here, however, no specific regulations affecting high schools are mentioned. The Constitution merely declares that: "The General Assembly shall establish and maintain an efficient system of public free schools throughout the State" (section 129), creates a State Board of Education to supervise and administer this system, and provides ways and means whereby the General Assembly shall support the schools thus established.

Acting on its constitutional authority the General Assembly has enacted (among many other school laws) the following relating specifically to the high schools:

"It shall be lawful for any district school board or district school boards in the same county, or the school boards of two or more districts in adjoining counties, to establish and maintain a public high school at such place as may be both most convenient for the pupils to attend and most conducive to the purposes of such school; provided, the establishment of any such high school or the teaching of high school branches shall not be allowed to interfere with the regular and efficient instruction in the elementary school branches."¹

"The State Board of Education shall prescribe rules and regulations governing the conduct of the high school and shall prescribe also requirements of admission and the conditions on which properly prepared pupils may attend said high school."²

In accordance with the power conferred upon it, the State Board of Education has formulated detailed plans and procedures for the conduct of high schools. These naturally include statements respecting aims and purposes. Thus, for illustration, in Bulletin, State Board of Education, Volume IX, No. 1 (July, 1926), one reads: "The function of secondary education today may be stated briefly as follows: To administer to the individual needs of youths of high school age, which is approximately from twelve to eighteen years, in such a way as to help them find and fill their respective places in the social order."³

From the proof sheets of a similar bulletin for the year 1926-27, one reads:⁴

"There is no question but that the function of secondary education is thoroughly understood by most educators today. The task before the school people, however, is to interpret clearly and to sell this new type of education to the general public. To be sure, the great increase in the enrollment in the high schools of the State indicates an unusual type of interest in high school education, but even with this increase in the enrollment there is yet need for a clarification of the atmosphere concerning the place of high school education in the general scheme of public education in Virginia."

If one takes this last quotation literally (and all evidence tends to show that it represents the situation fairly) it is clear that the public in general in Virginia has no very clear notions as to just what place the public high schools

¹Bulletin, State Board of Education, Vol. VI, No. 1, July, 1923, p. 41.

²Ibid., p. 42.

³Op. Cit., p. 8.

⁴Op. Cit., p. 8.

should occupy. This fact is no reflection upon the people of Virginia. A like situation obtains probably in all States of the Union. It may be true "that the function of secondary education is thoroughly understood by most educators today," but certainly educators are not entirely in accord in the judgments they give out. However, if the views of those educators who are making secondary education their life interest and study be taken into account, a close approximation to unanimity is had. How do the specialists in secondary education view the matter? The following quotations will give the answer:

Illustration No. 1:

"The teaching process throughout the secondary school period is concerned with putting the pupil in adjustment with the world in which he must live and with generating in him adaptability to a constantly changing world. The effect of the secondary school upon society should be to enable mankind to control its environmental relations rather than to abide in an attitude of passive acceptance of whatever environmental forces bring to pass."¹

Illustration No. 2:

"When we consider the kind of school demanded, three things stand out. First, it must be a school of life, of actual experiencing. No other one could furnish the needed learning conditions. Second, it must be a place where pupils are active, where pupil enterprises form the typical unit of learning procedure, for purposeful activity is the typical unit of the worthy life wherever lived. Third, there must be teachers who, on the one hand, sympathize with childhood, knowing thus that growing can take place only through progressive pupil activity, and who, on the other hand, see and know that growing is growing only as it leads to ever widening effectual control."²

Illustration No. 3:

"Man is a consumer of economic goods from birth to death. His close contact with a complex output of economic goods requires a new type of intelligence. The traditional cultural education which, for the mass of the people today, serves neither for leisure nor for utility, must give way to a modern education which will give power and enjoyment to those who are destined to be both producers and consumers. . . . Economic life makes a fundamental demand which education will increasingly heed in order to restore 'the well doing of everything that needs to be done.'"³

Illustration No. 4:

". . . The general purposes of the school are conceived to be two: First and fundamental, *to teach pupils to do better the desirable activities that they will perform any way; and, second, to reveal higher types of activities and to make these both desired and to an extent possible.*"⁴

Illustration No. 5:

"To my mind the greatest issue on the education horizon is the age old issue of aristocracy versus democracy. We cannot, in America, continue the individualism of the old frontier days. Whether we like it or not we must learn to live as members of groups in constant dependence upon one another. It is for us to determine on what basis this new mode of living is to be organized. Shall we live together as members of a family, or in the relation of master and servant, of patrician and plebeian? Shall we continue the old traditions of vocationalism and liberal education, or shall we reorganize our educational theory and practice so as to make all public education, first and foremost, a training for intelligent and responsible membership in

¹Morrison, Henry C. *The Practice of Teaching in Secondary Schools*, p. 14.

²Kilpatrick, William H. *Education for a Changing Civilization*, p. 112.

³Harep, Henry. *Economic Life and the Curriculum*, pp. 28-29.

⁴Briggs, Thomas H. *The Junior High School*, p. 157.

the social organism? . . . If we believe in democracy, we cannot doubt that our educational system will become increasingly dominated by ideals that embody our National germs and our National faith.

"Our first task, then, is to determine the social significance and purposes that we are to attach to education. In terms of the democratic ideal, this significance . . . is to promote understanding and sympathy and co-operation among men, by training each person for conscious membership in the social structure, in accordance with his native capacity, interests, and temperament."¹

Illustration No. 6:

"Education in the United States should be guided by a clear conception of the meaning of democracy. . . . The purpose of democracy is so to organize society that each member may develop his personality primarily through activities designed for the well being of his fellow members and of society as a whole.

". . . Consequently, education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends.

"In order to determine the main objectives that should guide education in a democracy it is necessary to analyze the activities of the individual. Normally he is a member of a family, of a vocational group, and of various civic groups. . . . Aside from the immediate discharge of these specific duties, every individual should have a margin of time for the cultivation of personal and social interests. . . . To discharge the duties of life and to benefit from leisure, one must have good health. . . . There are (also) various processes, such as reading, writing, arithmetical computations, and oral and written expression that are needed as tools in the affairs of life. . . . And, finally, the realization of the objectives already named is dependent upon ethical character, that is, upon conduct founded upon right principles clearly perceived and logically adhered to. . . . Consequently, this commission regards the following as the main objectives of education: (1) health; (2) command of fundamental processes; (3) worthy home membership; (4) vocation; (5) citizenship; (6) worthy use of leisure time; (7) ethical character."²

Illustration No. 7:

"The aims of education are . . . to keep democracy from degenerating into mobocracy, as Aristotle believed it would, and to direct progress to the end that the ideals of democracy may be more nearly attained.

"To accomplish this result the modern State . . . undertakes to develop ever greater numbers of youths and adults who will make the most of themselves, who will not only fit in with their fellows, but who will actively co-operate for common desirable ends, who will, by competing with each other individually and in groups, promote the selection and use of special aptitudes. The end in view in this process is the continual increase in that common welfare which is necessary to the welfare of the individual. Since the end of the last decade of the nineteenth century forward looking men and women have become more and more conscious of the seriousness of the economic, political, and social problems that civilization is facing—problems that must be met and solved. Thus there has been projected an emancipated secondary school, the aims of which are those implied in the aspirations of the democratic movement; that is, they must promote the welfare of society and the adjustment of the individual to society. *What is sought is not a traditional culture for all pupils but effective membership*

¹Taken from an article written by B. H. Bode, and appearing in School and Society, Vol. 18, No. 463 (Nov. 10, 1923), p. 546.

²Taken from the Cardinal Principles of Secondary Education, Bulletin, 1918, No. 35, U. S. Bureau of Education.

in society! Not a so called high standard of literary scholarship, but an intelligent appreciation of the immediate and remote environment—social, utilitarian, aesthetic—and a cooperative activity in improving it. The purpose is not preparation for college entrance requirements only, but preparation for the larger life as well; not a mind disciplined by activities removed from life, but by successful response to actual life situations.¹

Illustration No. 8:

"... Secondary education must be conceived as determined fundamentally by its functions as a social agency. Looked at from this point of view secondary education involves a number of important social principles.

"Three important groups of activities require the participation of the individual and establish three fundamental aims of secondary education. . . . These three groups of activities are distinguished accordingly as they involve primarily—(1) participation in the duties of citizenship, and in the non directly economic relations of cooperative group life; (2) participation in the production and distribution of economic utilities; (3) the life of the individual as a relatively free and independent personality. Thus the three fundamental aims of secondary education are:

"1. The preparation of the individual as a prospective citizen and cooperative member of society—the social-civic aim.

"2. The preparation of the individual as a prospective worker and producer—the economic-vocational aim.

"3. The preparation of the individual for those activities which, while primarily involving individual action, the utilization of leisure time and the development of personality are of great importance to society—the individualistic-avocational aim."²

Illustration No. 9:

The obligations or functions of a modern high school are:

1. To provide an advanced education for all the children of all the people.

2. To recognize individual differences.

3. To provide for exploration and guidance.

4. To recognize the adolescent nature of pupils.

5. To impart knowledge and skill in fundamental processes.

6. To prepare for higher institutions.³

It seems clear from these citations (many others might be made) that a new conception of the place and function of secondary education has recently come over the world. It is not primarily a means for bringing aggrandizement to the individual, either economically or socially, but it is a means of developing human potentialities so that the world collectively may reap therefrom more bountiful rewards. The end, in short, is public welfare. This involves the adaptation of instruction and training to the peculiar needs and interests of individual pupils. It suggests that programs of study and curricula must not be alike for all. It implies, also, that courses for the teaching of which no better reasons can be given than that they traditionally have been taught must give way to courses that relate definitely to the life problems that confront the contemporary world of today. As Dr. Briggs has stated it, the first task of the schools must be "to teach pupils to do better the desirable activities that they will perform any way." These are the activities relating to the practical affairs of life—the activities which a life in a democracy imposes upon us. But the task does not end there. The second great purpose stated by Dr. Briggs is that of revealing to youths "higher types of activities" and of making these "both desired and to an extent possible."

¹Cox, P. W. L. Curriculum Adjustment in Secondary Schools, p. 3-4.

²Inglis, A. Principles of Secondary Education, p. 340, ff.

³Adapted from Koos, L. V., The American Secondary School, p. 150, ff.

The newer ideal of education, therefore, transfers the emphasis from knowledge as an end in itself, or even as a means of formal mental discipline, to a means for realizing a larger personal and social objective. It is not so much passivity as activity that is sought among pupils. Youths are not expected so much to study lessons and memorize facts as they are expected to develop changed interests, attitudes, and procedures in dealing with ideas and facts. In other words, the ideals and aims of the secondary schools today should be the fostering of the scientific attitude of mind and the development of the pragmatic method of response.

All this means that the aims of secondary education in America today comprehend a differentiating education, i. e., an education adapted to the peculiar needs of all the children of all the people. It signifies that every normal youth of adolescent age shall have an opportunity to secure some of the good things of the spirit; shall be trained for intelligent and responsible membership in the social organism in which he lives; shall be adjusted to the world in which he must live, and yet so adjusted that he may make his own special contributions to the forces seeking to control his environmental relations and make them serve better both himself and society at large.

As Dr. Cox says, "forward looking men and women have become more and more conscious of the seriousness of the economic, political and social problems that civilization is facing," and believe that only a new type of education—an education that is realistic and vital and directly related to life as it is to be found about us today—can save civilization from many distressing experiences. To this end, the prime purpose of the schools must be (to paraphrase Dr. Cox) not a traditional culture—not a so called high standard of literary scholarship—not preparation for college entrance requirements only—not a mind disciplined by activities removed from life—but an intelligent appreciation of the immediate and remote environment—social, utilitarian and aesthetic—preparation for the larger life—and successful response to actual life situations.

Such an ideal involves a school in which pupils are actively experiencing life as it is being unfolded in Virginia and the United States today, a school in which reality is the dominant force at work, a school in which every adolescent boy and girl of normal ability is not only welcomed but where the curriculum and the forms are adapted to their natures, not their natures adapted to the curriculum and the forms of school administration.

Does Virginia today give evidence of having generally adopted this newer ideal of secondary education? The answer, to any careful observer, must be: No,—certainly not to the extent that it should have done so. Here and there, of course, these newer ideals dominate, and schools are conducted in harmony with them. In altogether too many sections, however, the expressed or unexpressed conviction appears to hold that secondary education is not for the many but for the few; not to discover and guide pupils' native interests, but to shape native interests to set forms of limited scope; not to educate the many directly for a world baffled by social, economic and political problems, but a few for a world of literary scholarship.

In short, Virginia, in its ideals, appears to adhere tightly to the old aristocratic notion of education for gentlemanly leisure or, at greatest, for cultural leadership in dignified learned pursuits, and is not heartily interested in the education of "all the children of all the people" for the world of active, practical, and even common duties. Traditional culture, formalism, and literary attainments appear to have more "dignity" than scientific mindedness, contemporary problems and realism. In fact, Virginia is glorifying its past—and it has had a wonderful past worthy of glorification; it is reverencing its great names of politics, government and war—and it has a full quota of magnificent names to which reverence is due; it is pointing with pride to its numerous institutions of learning—and it has an unusual array of renowned colleges, universities, and secondary schools; but, in doing all this,

Virginia has fallen into a kind of complacency. She is not giving glory enough to its present and future opportunities and potentialities; she is not encouraging enough her scientists, her artists, her potential captains of industry; she is not providing enough diversified types of schooling to meet the pressing demands of current economic life and trained leadership therein. In the judgment of the survey staff Virginia needs, not indeed to let go of the good which the past has given, but to reach out after more of the good which the present and the future have in store. In other words, Virginia needs a new philosophy of education, generally accepted, to guide her in school reforms.

CHAPTER XXII

THE ORGANIZATION OF THE HIGH SCHOOLS

In considering the organization of the secondary schools it is advisable to treat the city systems and the county systems separately.

A. Secondary Education in Cities

Virginia at present has twenty-three communities classified as cities and thus having school organizations separate from those of the counties in which they geographically are located. In all but five of these twenty-three the old type four-year high school, built on a seven-year elementary school, prevails. The exceptions to this plan are: Richmond, which has three junior high schools (grades 6-7-8) and one senior high school (grades 9-10-11) with an elementary course consisting of five years leading into these; Norfolk and Roanoke, each having two junior high schools (grades 7-8-9) and one senior high school (grades 10-11-12), together with six elementary grades preceding secondary school work; Harrisonburg, with the 6-2-4 plan in operation; and Bristol, which is definitely committed to the six-six plan, having one high school building housing the upper six grades (7-12 inclusive) and organized into the two divisions of junior and senior groupings.

The school work done in these five cities is, on the whole, of a very high grade. This is due, to a large degree, to the size of the systems. There is no denying the fact that, in comparison with other communities, the larger cities possess superior economic wealth and in consequence are enabled to secure advantages not obtainable by other constituencies. Money permits the erection of modern buildings; the employment of more and experienced and, perhaps, better prepared teachers; the enrichment of the curriculum; the equipment of libraries and laboratories; the furnishing of gymnasiums, auditoriums, and athletic fields; the inclusion of various types of courses requiring much machinery and adequate space in which to operate it; the adornment of walls and other open spaces with works of art and various other forms of aesthetic decoration; the employment of an adequate force of office assistants, special councillors and teachers; the utilization of motion picture machines, stereopticons, maps, charts and other supplementary aids to classroom work.

Nor is this all. Because of the larger numbers of pupils enrolled in city school systems the individual differences among them can much more readily be taken into account. Here courses of instruction can be provided that are impossible in smaller systems. Here a greater freedom for pupils to elect these courses is possible. Here educational, vocational and life counseling, on a personal basis and by trained agents, can be put into effect. Here the more progressive, educational ideas of organization, administration and method can be introduced. Here school spirit and morale can more readily be developed, and here pupil initiative and cooperation can frequently more easily be elicited. In short, the large city schools of today are forging ahead educationally as perhaps no other type of educational agency in the country is doing. About all that is necessary to say or do for these communities is to praise their endeavors and encourage them to continue in their progressive ways.

The five Virginia cities specifically mentioned above fall generally into the class of educational systems just sketched. Not that there is no chance for improvement among them,—for, in many ways, there is,—but taken collectively they represent a progressive type of endeavor.

The Smaller City Systems

It is when one turns to the smaller city systems of Virginia that one finds much to question in respect to their school organization. Specifically the outstanding weaknesses to be found therein (acknowledging many exceptions to the general statements) are the tendencies—

1. To key the entire school to the ideals of the college, thus making the high school essentially a college preparatory school and catering to the true needs of only a limited class of pupils.
2. To provide a restricted program of studies, rather inflexibly administered.
3. To hold rather rigidly to the formal types of school organization and of class teaching.
4. To encourage many pupils to complete their systematic secondary education at too early an age—an age at which they are too young wisely to enter college and too immature to secure responsible positions in the business world.
5. To provide little opportunity for pupils to test out their own interests, powers, and aptitudes or to be guided in the choice either of their school courses or of their life work.

Only those topics that relate directly to school organization will be discussed here. The others will be taken up in later chapters.

In the Inglis report (*Virginia Educational Survey, 1919, p. 227 ff.*) the superior advantages of a twelve-year school system, organized on the basis of junior and senior high school divisions, were briefly set forth. That survey staff definitely recommended the adoption of the 5-3-3 plan as a temporary measure but likewise added: "Eventually, and in the near future, Virginia should adopt the practice found in all parts of the country except the South, and provide an education for children from the ages of six to eighteen. When that is done the twelve grades of instruction should be organized on the 6-3-3 plan."¹

With the exception of the five cities already noted, no one has definitely taken any steps to bring its system of schools under the plan of organization suggested here. Indeed, not every one of the five cities has, as yet, adopted the twelve-year plan of school instruction. True it is that certain studies appear to indicate that an eleven-grade system turns out as well educated a group of young people as does a twelve-grade system. These studies are, however, not convincing. If college records be the sole standards of judgment, the conclusions may be valid. Even as thus made, however, they are scarcely fair. True education consists of much more than the mere ability to exhibit mastery in limited fields of formal knowledge. True education involves interests, attitudes, habits, and skills of many sorts—and these are not fully tested by means of formal examinations—at least of the types heretofore commonly employed.

Let it be granted that with the longer school year, the superior training of teachers, the improved character of textbooks, and the multiplication of material things designed to aid in the work of the school, a more nearly perfect product should be produced—and in a shorter period of time—than was the case a generation or so ago. Still this is but one side of the picture. Never before in the history of education has there been available such inexhaustible quantities of teaching materials of all sorts as at present. Never before have standards of achievement been set so high as they are today. Never before has breadth in education signified so much as it does in this generation—the ability to appreciate and enjoy the products of nature, art, literature, science, history, and the work-a-day world. Never before has vocational competition been more keen or the need for selecting one's vocation with care and wisdom been more necessary. All of which

¹Op. Cit., p. 229.

argues for a prolonged education rather than an abbreviated one—provided only it be an education that is adapted to the real needs of the learner. Instead of a school system of eleven years one of thirteen would appear to be better for Virginia and in keeping with the practices in other parts of the nation. This modification would permit of the extension of the system one full year at either end—a kindergarten year, at the beginning, and the twelfth grade attached to the high school. If then the compulsory school age limit were raised to sixteen (with provisions for continuation school work for pupils beyond that age), Virginia would be taking her place somewhat more nearly in step with the other States of the Union.

The addition of one or more years to the existing school course would obviously add to the cost of education. But the primary concern of any school system is not its cheapness. The added years should, through the superior training given to the boys and girls of Virginia, redound to the material and cultural advantage of the State. A Commonwealth that sows sparingly must assuredly also reap sparingly. Not, of course, that an additional year of mere formal schooling will much benefit either the pupils or the State. Indeed, it might be injurious. If the addition of another year to the system means more dull repetition of formal and uninteresting facts in the seventh and eighth grades—if, indeed, it means a multiplication and extension of much of the kind of work that is being done at present in the schools—there is positively no justification for it.

But there is no reason for dull, uninteresting work to find lodgment in the schools—least of all in the grades ministering to the welfare of early adolescents. The junior high school idea, with its plan of organization, has been developed solely for the purpose of adapting instruction to individual needs. In the estimation of the survey staff the first outstanding reform which should be introduced into Virginia's secondary school program is the general adoption of the junior high school idea.

In order that the essential features of the junior high school movement may be more generally understood there are here brought together some of the formulations of writers who have dealt with the subject. These set forth concisely the aims, purposes and factors of this new agency in school organization. The North Central Association of Colleges and Secondary Schools defines a junior high school in this way, namely:

"A junior high school is a school in which the seventh, eighth, and ninth grades are segregated in a building (or portion of a building) by themselves, possess an organization and administration of their own that is distinct from the grades above and the grades below, and are taught by a separate corps of teachers. Such schools, to fall within the classification of junior high schools, must likewise be characterized by the following:

1. A program of studies decidedly greater in scope and richness of content than that of the traditional elementary school.
2. Some pupil choice of studies, elected under supervision.
3. Departmental teaching.
4. Promotion by subject.
5. Provision for testing out individual aptitudes in academic, pre-vocational, and vocational work.
6. Some recognition of the peculiar needs of the retarded pupil of adolescent age, as well as special consideration of the super-normal.
7. Some recognition of the plan of supervised study."¹

Says Gosling:

"The purpose of the junior high school is to offer a program of studies which shall be suited to the varying needs of boys and girls in their early adolescence; to take into account the individual differences among boys and girls; to assist boys and girls to develop right attitudes toward life and its

¹North Central Association Bulletin, p. 4, 1919.

problems; to assist them in discovering and developing their natural aptitudes; to guide them carefully by a wise discipline through the trying time when they are passing from the period of control imposed by others to the period of self-control; to take into account their budding idealism and their emerging religious concepts; to give them opportunities for expressing their social instincts in helpful and inspiring service; to correct physical defects and to build up habits of clean and healthy living; to acquaint boys and girls in an elementary way with the social, the economic, and the political problems which they must soon face in the world outside of school; to inculcate in them both by theory and by practice the principles of good citizenship; to induce as many as possible to go on with their education in higher schools; and to give to those who must take up at once the toil for daily bread a good start by way of special, though elementary, vocational training."¹

Respecting the aims of the school, Briggs writes:

"Clearly an intermediate period of education (the junior high school period), beginning one or two years before the law releases any pupil from study (should) attempt at least five things: First, to continue, insofar as it may seem wise and possible, and in a gradually diminishing degree, common, integrating education; second, to ascertain and reasonably to satisfy pupils' important immediate and assured future needs; third, to explore by means of materials in itself worth while the interests, aptitudes, and capacities of pupils; fourth, to reveal to them, by material otherwise justifiable, the possibilities in the major fields of learning; and fifth, to start each pupil in the career which, as a result of the exploratory courses, he, his parents, and the school are convinced is most likely to be of profit to him and to the State."²

The judgment of Touton and Struthers:

"The place of the junior high school is that part of the field of education in which the pupil, after gaining control of the simpler tools whereby knowledge is attained, comes to use these tools in an attempt to discover his own interests, aptitudes, and capacities. Advocates of the junior high school do not claim to fix in the child settled habits of intellect, character, skill, or temperament. They do claim rather that the junior high school should in the seventh, eighth, and ninth grades guide the pupil in an exploration of the fields of human thought, action, and endeavor, thereby to equip him with knowledge of his interests and capabilities."³

Thus it appears that the chief function of the junior high school is to serve as a *transition* school, mediating between the formal procedures of the elementary school on one side and the specializing individualizing procedures of the senior high school on the other side. Its mission is to aid pupils to discover their own capacities and limitations, interests and distastes, powers and weaknesses. In short, it is the country's great opportunity school, designed to arouse the ambitions of the youth of the land, inspire them with the desire to realize their potentialities to the greatest extent possible, and guide them in ways that will make for individual satisfaction and social well being. Accordingly the junior high school is neither a subsecondary school nor a vocational or trade school. It is distinctly and confessedly an exploratory school. Its essential function is to provide outlooks, overviews, introduction to a world organized as the workshop and playground of man, and to help each youth to discover the most effective method of adjusting himself to that world in a satisfactory manner.

¹Gosling, T. H. "Educational Reconstruction of the Junior High School," *Educational Review*, Vol. 57, p. 377, ff.

²Briggs, T. H., *The Junior High School*, p. 26.

³Touton, F. C., and Struthers, A. B., *Junior High School Procedure*, pp. 5-6.

In order, therefore, that the junior high school may realize its peculiar mission, the following are the essential features that should characterize its organization and procedures:

1. A separate organization of the seventh, eighth, and ninth grades, or of at least two of these grades.
2. A separate building in which to house these grades.
3. A separate staff of teachers and supervisory officers to administer the work of these grades.
4. A program of studies differing greatly from the course of study to be found in the like-numbered grades of the traditional school in America.
5. A partial or complete departmental organization of subject matter and teaching.
6. The organization of a limited number of curricula, each containing groups of constant and of variable courses.
7. A definite, effective plan of educational and vocational guidance, definitely and effectively administered.
8. Certain elective studies, to be chosen by pupils under guidance.
9. Socialized recitation periods.
10. Supervised study periods.
11. Promotion by subject.
12. Methods of instruction differing notably from the methods employed in the grades above and the grades below, utilizing especially the psychological approach to all learning and employing much concrete illustrative material to establish principles.
13. The organization and administration of student activities in accordance with the needs and interests of adolescent pupils, regardless of the practices prevailing in the grades above or below.
14. The admission of pupils to the school on the basis of what is best for each individual, without undue regard to the conventional school work he has mastered.

It is the recommendation of the survey staff that as speedily as possible all the city systems of schools organize their work so as to include the junior high school idea, and preferably on a full 6-3-3 basis. For it is clear from the foregoing analyses that in the judgments of many, if not most, of our leaders the junior-senior high school organization is the best organization through which America can work out its ideals of democracy. As already stated, this new unit of organization in nowise seeks to shorten the total time a typical pupil shall remain in school, neither does it claim to be less costly in dollars and cents. Indeed, it is doubtful if the full benefits of the junior-senior high school organization can be secured short of a six-year period devoted primarily to the work of secondary studies and resting in turn upon a six-year elementary school.

What advantage is there, indeed, to be gained by hurrying young people through school? The survey staff found numerous cases of boys and girls being graduated from the Virginia high schools at fifteen years of age. Does intellectual, physical, and moral maturity count for little or nothing in securing an education? Under the laws of the State, fifteen-year old youths are not permitted to engage in lucrative work. What, therefore, may the immature graduates do in the interval between school days and the age of sixteen? The demands of citizenship surely require that they shall not be permitted to idle away time. The alternative, therefore, is that such youths should be in school—seeking the kinds of instruction their individual natures require.

Virginia's Omissions

That most of the secondary schools of Virginia are not organized so as to meet the needs of all types of individuals who attend them—or could be induced to attend them—may be seen from the following statistics, taken

from the various annual reports of the State Board of Education and from certain data gathered from questionnaires sent to the various secondary schools of the State.

In the year, 1925-26, not one of the twenty-three cities offered a course in vocational agriculture, although many of these schools were attended by pupils reared on the farms and might, conceivably, have been desirous of preparing themselves to make farming their chosen vocation.¹ In this same year, not one of these cities provided courses in home economics, at least in such form as to receive State aid therefor, although five of them did provide for the study of this important subject under the provisions of the Smith-Hughes Act.²

During this same year only eighteen of the twenty-three cities offered courses in commercial education.³ Further (omitting the five cities with junior high school divisions), few made more than incidental or relatively inconsequential provision for manual arts for boys. Repeatedly was the surveyor told, on his visits to various schools, that boys and girls did not care for these practical subjects—that they were not aspiring to positions in life calling for practical training of a manual or (less often) clerical kind. These statements, to the surveyor, suggests that, as yet, the so called practical subjects are being considered in an entirely mistaken manner. The prime function of these courses, like those of the older subjects, is not vocational training but educational insight. Certainly this should be true of all introductory and elementary courses in these fields. Even the more advanced courses in any of these departments must be considered as prevocational, rather than vocational, in their outcomes. Rarely can any high school completely train a boy or girl for an industrial or commercial position. At best, it can only lay foundations. An apprenticeship of some sort must necessarily follow before the youth can be said to be vocationally trained.

The survey staff, therefore, recommend that in organizing their work the city schools give more attention to the need of training in the various practical arts and so shape their requirements and curriculum that young people may not only test out their aptitudes in various fields, but may, if they choose, carry their training beyond the point of mere exploration.

Secondary Education in County Schools

There are in Virginia one hundred counties. Each of these is, for school purposes, organized into a single administrative district, with a district or county superintendent of schools appointed by the State Board of Education. In these counties—not counting the separate city systems within them—are 341 four-year accredited high schools and three accredited junior high schools.⁴ In addition to these 344 accredited schools there are 236 unaccredited schools, each devoting some attention to high school instruction.⁵ Classified by the number of years of instruction offered, these 236 schools are grouped as follows:

4-year schools	39
3-year schools	59
2-year schools	110
1-year schools	28

Further, at the present time 5,622 boys and girls are receiving high school instruction within these unaccredited schools, while last June the list of graduates from them numbered 253. Of this latter number, fifty-eight entered college in the autumn.

¹Bulletin, Vol. IX, No. 1, 1926, pp. 27-28.

²Ibid, pp. 30-31.

³Ibid, pp. 55-56.

⁴Bulletin, 1926, p. 58.

⁵From statistics furnished by Dr. Sidney B. Hall, State Supervisor of Secondary Education.

Most of these unaccredited schools are small, if the high school enrollment alone be taken into account. Thus, ten enroll five or fewer pupils; forty-three enroll from six to ten pupils; eighty-four enroll from eleven to twenty pupils; sixty-six enroll from twenty-one to forty pupils, and thirty-three enroll in excess of forty pupils.

It is of course impossible to state accurately just what the character of the work in these schools is. The fact that the State department requires that a school shall be organized as a four-year school in order to secure recognition would alone debar all but thirty-nine of them from receiving accrediting honors, even though their work was of high quality. It is, however, scarcely conceivable, that the educational facilities of these schools can be as good as it could be made. Thus, to take only one criterion, their library facilities are woefully below standard. For example, twenty-three of these 236 schools report they have no library whatever; four state that they have fewer than twenty books; twenty report they have under fifty books, and twenty-five declare they have fewer than one hundred books.¹

Observations of some of these small unaccredited high schools lead the survey staff to the conclusion that, considered as a class, they are not adequately equipped for their work. Nevertheless, despite these inadequacies, these schools are costly. The per capita cost for instruction in them is enormously high. This fact is revealed in the following table:

The per capita cost for high-school instruction in 236 unaccredited schools—

Per capita cost	No. of schools
Under \$50	55
From \$50 to \$75	83
From \$76 to \$100	38
More than \$100	33
Schools not replying	27
 Total	 236

These figures do not, however, tell the entire story. An analysis of the raw data from which the table above given was compiled shows that in two of these schools the per capita cost was in excess of \$250; in six others it was in excess of \$150; and in eight others in excess of \$125. When it is recalled that the per capita cost for all the accredited high schools of Virginia taken together is:

For cities	\$57.85
For counties	\$62.01
For both combined	\$59.93

it is conclusive evidence that many rural communities are paying an excessive price for secondary education for their sons and daughters, and are probably then getting only mediocre returns for their investments. In the estimation of the survey staff the small rural high school is both undesirable and uneconomical. The further extension of the principle of school consolidation appears to be the only final solution of the difficulties involved, and true it is that, because of their geographical locations, many of these isolated country high schools cannot be consolidated without incurring disproportionate expenses for transportation of pupils and for other incidental charges.

¹Taken from recently gathered statistics found in the office of the State Supervisor of Secondary Education.

The Accredited County High Schools

In organization the accredited county high schools are all four-year schools, resting upon a foundation of seven elementary grades. Many of these schools are doing excellent work within the limits of their narrow programs of study and with the limited resources at their command. Many, however, are not doing so. The detailed analyses of the causes of weakness will be discussed in later chapters.

Considered solely from the standpoint of organization the following facts may be adduced: Despite the laudable efforts of the State department to secure school consolidation, there are yet in Virginia relatively large numbers of small accredited high schools. Figures recently released by the Bureau of Education show 146 accredited three-teacher high schools for the year 1926-1927,¹ although this number is smaller by twenty-two than the year previous. There are, moreover, seventy-five accredited four-teacher high schools at present in operation, thus bringing the total number of three-teacher and four-teacher schools up to 221.

It is clear to any analysts of the situation that, as has been pointed out elsewhere in this report, the geographical and topographical character of many portions of Virginia make any thoroughgoing plan of consolidation of schools in those areas wholly impracticable. The populations are so sparse and the natural obstacles to travel so great that the only type of consolidated school that could be established would be a boarding school. In the course of years this idea might be a feasible one. At present it is economically unthinkable. Hence, in these sparsely settled areas of large extent the small one-teacher, two-teacher, or three-teacher school (giving some work of high school grade) must of necessity continue.

Nevertheless, the limits of feasible consolidation have not as yet been reached. There are still many schools situated in close proximity to each other and apparently capable of being merged. Table 24 shows the situation.

The survey staff, therefore, urges that the present policy in reference to the consolidation movement be continued and that as speedily as possible the small, weak high schools be made to give place to larger, better equipped, better taught consolidated ones.

The Junior High School Idea

No doubt the junior high school is less adapted to rural districts and to small school areas than it is to urban districts. Nevertheless, the essential principles underlying the junior high school idea are as valid for rural pupils as for city pupils. That is, each child, wherever his residence, is entitled to have his native aptitudes, interests, and powers tested by means of a series of tryout courses of ample range, and then to be afforded the opportunity of developing his real potentialities in a manner most likely to be conducive to his own happiness and to the welfare of society generally. To this end, it seems desirable to urge upon school authorities in rural Virginia, not indeed the establishment of a full fledged junior high school, but the incorporation into their systems of a large as possible an amount of the easily transferrable elements of that new unit. Observations in many parts of the State point unmistakably to the need for some kind of a transition grade which shall serve to adjust rural boys and girls to high school work. At present the break between the elementary school and the high school is too abrupt—the change from one to the other is too sudden and too difficult.

It seems, therefore, to the survey staff, that the utilization of the eighth grade for the purpose of making educational adjustment would meet the situation most admirably. Just what should be the program of studies provided for this new unit of work in rural high schools must be left for discussion until a succeeding chapter. Suffice it to say, however, that with the spirit, purposes, and procedures of the junior high school fully accepted as guiding principles the program of studies

¹From data furnished by Dr. S. B. Hall, State Supervisor of Secondary Education.

could readily be left to each school to work out for itself under the guidance of the State Department of Education.

In proposing that the eighth grade be converted into an intermediate try-out period, the survey staff has no intent to urge the reduction of the time allotted either to the elementary school or to the high school. The staff believes that the seven-year elementary school—as organized and conducted at present—gives rural boys and girls none too long a training in fundamental courses. Neither does it wish to reduce the present requirements for the intensified aspects of high-school work. It merely seeks to insert another year's training between the two older units, believing the transitional year will tend both to perfect the attainments in English, mathematics and other fundamental subjects and will also enable pupils to select their later school careers with finer discrimination. The proposed organization, therefore, becomes either a 7-1-4 plan or a 7-5 plan.

The Class Periods

Under the advice of the State Department of Education class periods throughout most of the high schools of the State are being reorganized on a basis of sixty minutes, gross. The expectation of the State department is that a portion of each class period, thus lengthened, will be devoted to study under the direction of the classroom teacher.

This new arrangement is admirable and in accord with all of the best accepted theories of school methodology. One caution, however, needs to be stressed, namely: In order for the plan to succeed fully, the study period must first of all be truly a directed period of study; and, secondly, it must be utilized merely as a means of initiating attacks upon assignments. If pupils and teachers get the idea that all lessons can be thoroughly prepared or mastered in the limited period of twenty or thirty minutes more harm than help will be the outcome of the innovation. There is, happy to say, no indication that such mistaken notions of purpose and procedure are being entertained or practiced.

CHAPTER XXIII

THE PROGRAM OF STUDIES

By the program of studies is here meant the entire subject matter offerings or courses of instruction provided by a given school system. By a curriculum is meant the definite arrangement of a given number of these school courses, selected with the intent of fitting a pupil, somewhat adequately, for a more or less clearly conceived goal or occupation.

It seems clear to an observer that up to the present time, tradition has, to a very large degree, determined what shall be the program of studies in the high schools of Virginia. What was conceived to be good for children a generation or so ago is still, by many, believed to be the best for children of our day and age. Of course, such may be the case. No subject of study should be discarded merely because it is old. On the other hand, no subject should be retained in the curriculum solely because of its former glory. Educational theory today demands a functioning curriculum,—that is, one that really serves the ends for which it is established. Consequently no subject of study may rightfully lay claim to preservation within the school unless it contributes directly or indirectly to the aims of the school. In other words, each subject must yield educational values. Indeed, it is even more than a question of educational values. It is a question of relative educational values. Unless a given subject can be shown to be capable of yielding educational values of a unique and superior kind, and in greater amount than certain other subjects yield, it may not, in justice, occupy an exalted, or even an equal, place in the scheme of things. There is considerable evidence that tends to show that certain traditional subjects now holding prominent places in the Virginia schools do not meet this test, at least for some types of pupils.

A second very powerful influence which is shaping the high school programs of study in Virginia is that of the State Board of Education. Especially true is this in respect to minimum offerings and requirements. For example, no four-year high school is accredited by the State Board unless it offers in its school—and requires in all of its curricula—the following units or years of work:

English	four units
Mathematics	two units
American history	one unit
Civics and problems of democracy.....	one unit
Science	one unit
Elective	five units

Schools that care nothing for State recognition and make no effort to become accredited may, of course, ignore these standards. The number of such schools is however exceedingly small. Indeed, the greatest ambition a school has, and the greatest honor that can come to it, is to be approved by the accrediting agencies.

Likewise a school system of notable strength and resources may, if it desires, go far beyond the minimum requirements thus established—and, indeed, most schools of this type do so. But even these schools, it appears to the survey staff, are less flexible in their administration than circumstances sometimes warrant. In what particular respects this is true will be shown later.

It is, however, the small accredited school—the three teacher or the four teacher school—that feels the pinch of inflexibility most. True it is that the State Board has rendered invaluable service to these small schools in helping them to organize their programs of study and to adjust them to a workable school schedule. Nevertheless, to the survey staff, there is much need for reform in these small schools. Some of these reforms can come from modification in existing regulations; some must come as the result of legislative enactment; and all must come through an aroused public opinion and a common desire for reform.

Three Aspects of the Problem

In order that the entire subjects of programs and curricula may be taken up most expeditiously, the topic will be broken up into three parts. One of these will concern itself with junior high schools; another will deal with the three-year and four-year senior high schools of the cities; and the third will treat the situation in the small rural or county high schools.

The Program of Studies in Junior High Schools

Although Virginia has, as yet, few junior high schools, it seems probable that many others will be developed within the next few years. Certain it is that this type of school is being established very rapidly in other parts of the United States and it seems highly desirable that the movement should be fostered here. In fact, wherever the junior high school has been established in the State—and established on thorough junior high school principles—it has proved to be a genuine success. Moreover, its program of studies is, for the most part, up-to-date, effective and defensible.

The best educational theory of the day holds to the belief that the function of the junior high school is to *mediate between* the strictly elementary school work of the first six grades and the strictly secondary school work of the upper three grades. The aim of the elementary school is to provide a *common integrating* education for all pupils; the aim of the senior high school is to provide, to a notable degree, an *uncommon, individualized, differentiating* education for all who can profit from it; and finally, the aim of the junior high school is to *lead gradually* from the realm of common integrating instruction to the realm of the uncommon, individualized, differentiating education.

In order to realize the aims sought, the program of studies for junior high schools in the United States is commonly organized with few or no optional studies allowed pupils in the seventh grade; with limited election of subjects in the eighth grade; and with considerable freedom of choice of studies in the ninth grade. Or, in lieu of these arrangements, pupils are given the opportunity to make provisional choice of a fixed curriculum in the eighth grade, with the expectation that this choice will either be corrected or made permanent before the ninth grade is reached. In all cases, however, the work of the seventh grade remains relatively constant for all.

In order that a basis for comparisons may be made, there are here presented typical programs of study that are operating outside of Virginia, together with the programs of two of Virginia's junior high schools.

Detroit, Michigan, Program of Studies¹

	SEVENTH GRADE		EIGHTH GRADE		NINTH GRADE			
	B	A	Genl. Tech. Coml.		Genl. Tech. Coml.		Industrial	
			Boys	Girls	Boys	Girls	Boys	Girls
Health	5	5	5	5	5	5	3	5
Social science	5	5	5	5	5	5	2	2
English	5	4	4	4	4	4	3	3
Mathematics	4	4	3	3	2	2	3	3
General science	3	2	2	2	2	2	2	1
Auditorium	2	2	2	2	2	2	2	2
Music	1	1	1	1	1	1	1	1
Art and design	1	1	1	1	1	1	1	1
Foreign language			5		5			
Cooking (girls)	2	3	1	3	1	1	3	
Sewing (girls)	2	3	1	3	1	1	3	
Household science (girls)				1		1		15
Shops (boys)	3	5	1	6	1	1	6	
Mechanical drawing (boys)	1	1	1	2	1	1	3	
Bookkeeping							5	
Business practice					5		1	
Statistics							2	
Typewriting							2	
Penmanship					1			
Totals†	30	30	30	30	30	30	30	30

No differentiation is provided for in the seventh grade except insofar as offering shop work and mechanical drawing to the boys, and home economics to the girls constitutes differentiation. There are no electives in the seventh grade, but a wide variety of curricular experience is prescribed for all pupils. In vocational subjects this variety is greater in 7-A than in 7-B.

Rockford, Illinois, Junior High School Outlines of Courses of Study³

SEVENTH GRADE

Required—7-B:	Periods per week	Required—7-A:	Periods per week
English	5	English	5
Arithmetic	5	Arithmetic	5
Social science	5	Social science	5
Music	2	Music	2
Drawing	2	Drawing	2
Industrial arts—boys	5	Industrial arts—boys	5
Household arts—girls	5	Household arts—girls	5
Penmanship and spelling	3	Auditorium exercises	3
Physical education	3	Physical education	3

EIGHTH GRADE

Required subjects: (20 periods per week)	Elective subjects: (10 periods per week)
English	Latin I, II
Arithmetic	French I
Social science	Business practice I, II
General science	Typewriting I (8-A only)
Music or drawing ⁴	Special art, I, II
Physical education	Special music, I, II
	Dramatics I, II
	Industrial arts (Carpentry, plumbing and heating, mechanical draw- ing, electricity)
	Foods I, II
	Clothing I, II

¹Davis, Calvin O., Junior High School Education, p. 310.

²Totals corrected for inclusion in column of both boys' and girls' special work.

³Davis, Calvin O., Our Evolving High School Curriculum, pp. 180-181.

⁴Band or orchestra may be substituted for music.

Rockford, Illinois, Junior High School—Continued

NINTH GRADE

Required subjects: (15 periods per week)	Periods per week	Elective subjects: (Not less than 10 periods, not more than 15 pe- riods)	Periods per week
English	5	Latin I, II, III	5
General science	4	French I, II, III	5
Social science	4	Algebra I, II	5
Physical education	2	Business practice I, II	5
Elective (continued)	2	Typewriting I, II, III	5
Foods I, II, III	5	Special art I, II, III	5
Clothing I, II, III	5	Special music I, II, III	5
		Dramatics I, II, III	5
		Industrial arts	5
		(Pattern, automotive, me- chanical drawing, machine)	
		Band	2
		Orchestra	2

A Composite Program*

Recently (1926) the firm of Allyn and Bacon, publishers, issued a booklet giving the results of a tabulation of the courses of study used in "seventy-eight representative school systems situated in widely separated points all over the United States." The following table reproduces these compilations, the subjects being arranged in the order or the frequency of their occurrence in junior high school courses of study:

Junior High School Unit, Program of Studies

(78 School Systems)

SEVENTH GRADE		EIGHTH GRADE		NINTH GRADE	
SUBJECT	Average Periods Per Week	SUBJECT	Average Periods per Week	SUBJECT	Average Periods per Week
English.....	7	English.....	5	English.....	5
Social studies.....	6	Social studies.....	5	Health.....	2
Mathematics.....	5	Mathematics.....	5	Social studies.....	5
Health.....	3	Health.....	2½	Mathematics.....	5
Industrial arts.....	4	Industrial arts.....	4	Foreign languages†.....	5
Home economics.....	3	Home economics.....	3	Industrial arts†.....	5
Music.....	2	Music.....	2	Home economics†.....	5
Art.....	2	Science.....	3	Science†.....	5
Science.....	3	Art.....	2	Commercial studies†.....	5
Foreign languages†.....	4	Foreign languages†.....	5	Social studies†.....	5
Commercial studies†.....	4	Commercial studies†.....	4	Art†.....	3

*Davis, Calvin O., *Our Evolving High School Curriculum*, p. 185.

†Variables.

Roanoke, Virginia, Junior High Schools, Program of Studies

SEVENTH GRADE		EIGHTH GRADE		NINTH GRADE	
English	5	English	5	English	5
U. S. history $\frac{1}{2}$ }	5	General language.....	5	Algebra	5
Civics $\frac{1}{2}$ }	5	General mathematics	5	General history Eu-	
Geography	5	Citizenship Tr.	5	rope	5
Arithmetic	5	Spelling .....2 or 3		Introduction to	
Health	5	Writing .....2 or 3		science	5
ELECTIVE		ELECTIVE		ELECTIVE	
Woodwork	2	Woodwork	2	Woodwork	5
Home economics	2	Sewing	2	Sewing	2 or 3
Ph. Tr.	2	Cooking	2	Cooking	2 or 3
Music	2	Sewing	2	Latin	5
Writing	2 or 3	Expression	2	Music	2 or 5
Art	2 or 3	Ph. Tr.	2	Expression	1
		Art	2	Art	2
		Music	2	Ph. Tr.	2

Norfolk (Blair)

SEVENTH GRADE
(Prescribed for all alike)

English	6
Mathematics	5
History and civics	3
Science	2
Gymnasium	2
Industrial or household arts.....	2
Art.....	3
Music	2
Hygiene	2
Activities	2
Guidance	1
Total	30

LOW EIGHTH GRADE

(Choice of English or of Foreign Language Curriculum)

	In English Curriculum	In Foreign Language Curriculum
English	8	6
Mathematics	5	5
History and civics	4	4
Science	3	3
Foreign language	0	4
Gymnasium	2	2
Industrial or household arts.....	2	2
Art	2	1
Music	1	1
Hygiene	1	0
Activities	2	2
Total	30	30

Norfolk (Blair)—Continued

HIGH EIGHTH GRADE

	In English Curriculum	In Foreign Language Curriculum	In Commercial Curriculum	In Industrial or Household Arts Curriculum
English	8	6	6	6
Mathematics	5	5	5	5
History and civics....	4	4	4	4
Science	3	3	2	2
Gymnasium	2	2	2	2
Industrial or house- hold arts	2	2	2	6
Art	2	1	1	1
Music	1	1	1	1
Hygiene	1	0	1	1
Activities	2	2	2	2
Foreign language....	0	4	0	0
Typewriting	0	0	2	0
Business practice...	0	0	2	0
Bookkeeping	0	0	0	0
Total	30	30	30	30

NINTH GRADE

	In English Curriculum	In Foreign Language Curriculum	In Commercial Curriculum	In Industrial or Household Arts Curriculum
English	8	6	6	6
Mathematics	5	5	5	5
History and civics....	4	4	4	4
Science	3	3	3	3
Gymnasium	2	2	2	2
Industrial or house- hold arts	2	2	2	6
Art	2	0	1	1
Music	2	1	1	1
Hygiene	0	0	0	0
Activities	2	2	2	2
Foreign language....	0	5	0	0
Typewriting	0	0	2	0
Business practice...	0	0	0	0
Bookkeeping	0	0	2	0
Total	30	30	30	30

In the judgment of the survey staff the junior high schools of Virginia, wherever they have gotten thoroughly established, are providing remarkably progressive and defensible programs of study. Moreover, these programs not only incorporate in themselves the modern principle of educational enrichment—thus furnishing to boys and girls extensive opportunities to acquire realistic experiences of many kinds and forms—but they also are being administered in a manner which takes notable account of individual differences and needs. As has been stated before, the survey staff believes no more helpful educational reform can come to Virginia than through the rapid multiplication of the junior high school idea, carrying with it an enriched and flexible curriculum for all seventh, eighth, and ninth year pupils. In particular it commends the following more or less commonly found features and recommends their adoption by all schools contemplating a reorganization of their procedures:

1. A school week consisting of not fewer than thirty sixty-minute class periods, with directed study an essential characteristic of each period.
2. A highly enriched program of studies.
3. A prescribed uniform curriculum for all seventh-grade pupils.
4. The establishment of at least four parallel curricula, beginning with the eighth grade, and the election of work by curricula rather than by subjects for eighth and ninth grade pupils.
5. The inclusion of the following subjects as constants in each curriculum for each of the three years: English, mathematics, social studies, practical arts, health and physical education, drawing, art, and music.
6. Providing for testing out pupils' aptitudes and interests in foreign language and business practice during one semester of the eighth grade, with freedom to continue or discontinue the study thereafter as circumstances warrant.

The Program of Studies in Senior High Schools in City Systems

Below are presented the programs of study of three of Virginia's senior high schools—Norfolk, Staunton, and Harrisonburg—and two composite tables showing the offerings of representative cities outside of Virginia.

Norfolk, Virginia, Curricula of Matthew Fontaine Maury High School

GENERAL

GENERAL A		GENERAL B	
	Units		Units
Analysis:		Analysis:	
English	4	English	4
Mathematics	2	Mathematics	3
Foreign language	2	Science	2
Science	2	History	2
History	2	Elective	5
Elective	4		
	16		16

NINTH YEAR	NINTH YEAR
English.	English.
Elementary algebra.	Elementary algebra.
A foreign language	Science.
Science.	One elective.
TENTH YEAR	TENTH YEAR
English.	English.
Plane geometry.	Plane geometry.
A foreign language	Science (biology).
Science (biology).	One elective.
ELEVENTH YEAR	ELEVENTH YEAR
English.	English.
American history.	Algebra.
Two electives.	American history.
	One elective.
TWELFTH YEAR	TWELFTH YEAR
English.	English.
Civics and problems in American democracy.	Civics and problems in American democracy.
Two electives.	Two electives.

Norfolk, Maury High—Continued

COLLEGE PREPARATORY

CLASSICAL		TECHNICAL	
Analysis:	Units	Analysis:	Units
English	4	English	4
Mathematics	3	Mathematics	3
Latin	3	Modern language	2
Physics or chemistry.....	1	Physics or chemistry.....	1
History	2	History	2
Elective	3	Elective	4
	16		16

NINTH YEAR	NINTH YEAR
English. Elementary algebra. Latin. One elective.	English. A modern language. Elementary algebra. One elective.

TENTH YEAR	TENTH YEAR
English. Plane geometry. Latin. One elective. (Note.—American history may be taken in the tenth year and civics, etc., in the eleventh year.)	English. Plane geometry. A modern language. One elective. (Note.—American history may be taken in the tenth year and civics, etc., in the eleventh year.)

ELEVENTH YEAR	ELEVENTH YEAR
English. Latin. Algebra. American history.	English. Algebra. American history. One elective. (Note.—Pupils planning to enter colleges which require more than two years modern language for entrance should elect additional foreign language.)

TWELFTH YEAR	TWELFTH YEAR
English. Civics and problems in American democracy. Physics or chemistry. One elective. (Note.—Pupils planning to attend colleges which require four years Latin for entrance should elect a fourth unit in Latin.)	English. Civics and problems in American democracy. Two electives. (Note.—Pupils planning to attend colleges which require more than three units of mathematics should elect a fourth unit in mathematics.)

Norfolk, Maury High—Continued

VOCATIONAL

HOUSEHOLD ARTS (For Girls)		COMMERCIAL		HOUSEHOLD ARTS (For Girls)	
	Units	Analysis:	Units	Analysis:	Units
Analysis:		English	4	English	4
English	4	Commercial subjects	6½ or 6	English	4
Manual training	3	Science	1	Household arts	3
Mathematics	2	History	2	Mathematics	1
Science	1	Elective	2½ or 3	Science	3
History	2			History	2
Elective	4			Elective	3
	16				16

NINTH YEAR—M. Tr.		NINTH YEAR—COMMERCIAL		NINTH YEAR—HOUSEHOLD ARTS	
	Units		Units		Units
English.		English.		English.	
Social studies.		Junior business training.		Household arts.	
Elementary algebra or commercial arithmetic.		Commercial arithmetic.		Science (biology).	
Industrial arts.		One elective.		One elective.	

TENTH YEAR—M. Tr.		TENTH YEAR—COMMERCIAL		TENTH YEAR—HOUSEHOLD ARTS	
	Units		Units		Units
English.		English.		English.	
Algebra or plane geometry.		Bookkeeping.		Household arts.	
Science (biology).		Science (biology).		Science (biology).	
Shop work and mechanical drawing.		Two electives.		One elective.	
		(Note 1—see next page.)			

ELEVENTH YEAR—M. Tr.		ELEVENTH YEAR—COMMERCIAL		ELEVENTH YEAR—HOUSEHOLD ARTS	
	Units		Units		Units
English.		Choose either of the following curricula:		Choose either of the following curricula:	
Shop work and mechanical drawing.		<i>Stenography</i>		<i>Bookkeeping</i>	
American history.		English.		English.	
One elective.		Stenography.		Bookkeeping.	
		Typewriting.		Typewriting.	
		Commercial geography and commerce.		Commercial geography and commerce.	
		Commercial law.		Commercial law.	
		American History.		American History.	
		(Note 2—See next page.)		(Note 2—See next page.)	

Norfolk, Maury High—Continued

MANUAL TRAINING (For Boys)	COMMERCIAL	HOUSEHOLD ARTS (For Girls)
TWELFTH YEAR	TWELFTH YEAR—VOCATIONAL	TWELFTH YEAR
English.	Choose either of the following curricula:	English.
Shop work and mechanical drawing.	English.	Household arts.
Civics and problems in American democracy.	Stenography.	Household chemistry.
One elective.	Typewriting.	Civics and problems in American democracy.
	Business administration and accountancy.	(See note 3.)
	Civics and problems in American democracy.	

(Note 1.—If a pupil in the tenth year changes to commercial from some other curriculum he must elect commercial arithmetic and junior business training. Pupils who have taken the commercial course in the junior high school do not take junior business training or commercial arithmetic in Maury.)

(Note 2.—Bookkeeping may be taken as an elective and commercial geography and commercial law put off until the senior year.)

(Note 3.—Students who have credit for general science in the junior high school may elect some other subject in place of household chemistry.)

Regulations Affecting Tenth, Eleventh, and Twelfth Year Electives in the Maury High School, Norfolk

In May and December pupils will be asked to choose electives for the following term. If a pupil is planning to go to college he should be very careful to select his electives to meet the entrance requirements of the college he expects to attend. If his scholarship justifies it a pupil may obtain office permission for extra work in any curriculum.

The electives in the tenth year are to be chosen from:

History I—Early European. History III—Modern European.
History—World history.

College preparatory pupils may elect history 7a, American history.

Note.—One year of American history and one year of civics and problems in American democracy taken in the senior high school, are required of all pupils before graduation from Maury. Pupils who entered Maury before February, 1925, may graduate by taking one-half year American history and one-half year civics.

Science—Physical geography or biology.

Foreign language—French, Latin, or Spanish. A pupil cannot begin the study of two foreign languages the same term. For credit toward graduation a foreign language must be studied two years.

Commercial arithmetic, bookkeeping, junior business training.

Manual training, mechanical drawing, or household arts.

Algebra is an elective for commercial and household arts pupils; for commercial and household arts pupils who have had a year of algebra, geometry is an elective.

The electives in the eleventh year are to be chosen from:

History I—Early European. History III—Modern European.
History V—World History.

College preparatory pupils who have taken American history may elect civics and problems in American democracy.

Science—A pupil in the eleventh year must elect either chemistry or physics, if science is elected; if a second science is desired, special permission may be obtained from the head of the science department to take physical geography or biology. A pupil must take elementary algebra before beginning physics.

Algebra.

Foreign Language—French, Latin, or Spanish.

Commercial subjects—Bookkeeping, stenography, typewriting, commercial law or commercial geography.

Manual training, mechanical drawing or household arts.

The electives in the twelfth year are to be chosen from:

History I—Early European. History III—Modern European.
History V—World history.

Science—If a senior elects science it must be physics or chemistry; if a second science is desired, special permission may be obtained from the head of the science department to take physical geography or biology. If a pupil in the junior year has taken chemistry or physics, he may obtain special permission from the head of the science department to take biology or physical geography his senior year. A pupil must take elementary algebra before beginning physics.

Household chemistry is open to pupils who have had a year of chemistry.

Mathematics—Algebra; to pupils who have had two years algebra and a year of geometry, solid geometry, trigonometry, or advanced algebra; for commercial or household art students, algebra or geometry.

Commercial subjects—Bookkeeping, stenography, typewriting, accountancy, commercial law or commercial geography.

Foreign language—French, Latin, or Spanish.

Mechanical drawing—Shop work and mechanical drawing, or household arts.

Curricula Effective for Pupils who Entered Maury Before February, 1927

Graduation from Maury High School is based on sixteen units of work which vary in the different curricula. These are changed from time to time to meet changing requirements of the State Board, or for other reasons. Pupils who enter Maury February, 1927, or thereafter, must conform to the curricula mapped out in the upper left corner of this sheet. Pupils who entered Maury before that time may graduate under the new requirements or the old ones which are given here. They must conform either to the one or the other. Careful comparison will show that only slight changes have been made.

General Regulations in the Maury High School, Norfolk

1. Under State requirements physical education is required of all pupils except those excused because of some physical defect.
2. One half-year of musical appreciation is required of all pupils in Maury before graduation. Musical Theory and Orchestra are electives for which one-half point a year credit is given. For credit toward graduation theory or orchestra must be studied for two years.
3. If a pupil cannot stay in Maury to graduate, upon the written request of the parent, office permission will be granted the pupil to select such courses as seem to offer the best preparation for what he desires to do.
4. If a pupil because of some physical defect, needs a specially arranged schedule his home teacher or the school counsellor will be glad to make any possible adjustment.
5. Pupils who work or whose duties take so much time that they haven't the opportunity to do a normal amount of daily home study, may have their schedules lightened.
6. Summer school offers pupils who have failed an opportunity to make up work; it gives superior pupils a chance to do new work. Only two units of summer school work will be credited towards graduation.

Staunton, Virginia, Four-Year High School, Program of Studies

FIRST YEAR <i>Required</i>	THIRD YEAR <i>Required</i>
Algebra I. Physical training. <i>Elect Two (2)</i> General science I. Latin I. History I	English III. History III. (U. S.). Physical training. <i>Elect Two (2)</i> Chemistry III. Mathematics III. (Plane geometry.) Latin III. (Cicero.) Spanish I. French I.
SECOND YEAR <i>Required</i>	FOURTH YEAR <i>Required</i>
English II. Algebra II. Biology II. Physical training. <i>Elect One (1)</i> English history II. Latin II. (Cæsar.) Bible II. (A. or B.)	English IV. History IV. Physical training. <i>Elect Two (2)</i> Physics IV. Mathematics IV. Latin IV. French II. Spanish II.

Harrisonburg High School, Groups of Courses Leading to Graduation

Harrisonburg, Virginia, organizes its program of studies under four definitely outlined curricula—collegiate, scientific, general, and commercial. The following gives these curricula in full:

Year	COLLEGIATE Curriculum		SCIENTIFIC Curriculum	
I.	English	R	English	R
	Mathematics	R	Mathematics	R
	Latin	R	Science	R
	History	E	History	E
	Science	E	Latin	E
II.	English	R	English	R
	Mathematics	R	Mathematics	R
	Latin	R	Science	R
	Science (biology)	R	Latin	E
			History	E
			English	E
III.	English	R	English	R
	Mathematics	R	Mathematics	R
	Latin or French	R	Science	R
	History, U. S.	R	History, U. S.	R
			Latin or French	E
IV.	English	R	English	R
	Mathematics	E	Mathematics	E
	Latin or French	R	Science	R
	History	R	History	R
	Chemistry or physics	E	Latin or French	E
Year	GENERAL Curriculum		COMMERCIAL Curriculum	
I.	English	R	English	R
	Mathematics	R	Commercial law	R
	History	E	Latin or French	E
	Science	E	Science	E
	Latin	E	History	E
II.	English	R	English	R
	Mathematics	R	Commercial arithmetic	R
	History	E	Science	R
	Science	R	Latin or French	E
	Latin	E	History	E
III.	English	R	English	R
	Mathematics	R	History	R
	Science	E	Typewriting	R
	History, U. S.	R	Bookkeeping	R
	Latin or French	E	Stenography	R
IV.	English	R	English	R
	Mathematics	E	History	R
	Science	E	Typewriting	R
	Latin or French	E	Bookkeeping	R
	History	R	Stenography	R

Home economics is offered in years III and IV.

History in year IV is problems of American democracy and civics.

Pupils who do not take Latin in the scientific course may take U. S. history in the second year and begin French in the third year.

Penmanship and spelling throughout the commercial course.

Science in the second year is biology.

Composite of Seventy-Eight School Programs.

Allyn and Bacon present the following program as a composite program of studies, obtained by analyzing the curricula of seventy-eight representative senior high schools:

TENTH GRADE		ELEVENTH GRADE		TWELFTH GRADE	
SUBJECT	Average Periods Per Week	SUBJECT	Average Periods Per Week	SUBJECT	Average Periods Per Week
English.....	5	English.....	5	English.....	5
Foreign languages†.....	5	Foreign languages†.....	5	Foreign languages†.....	5
Industrial arts†.....	5	Commercial studies†.....	5	Commercial studies.....	4
Commercial studies†.....	5	Industrial arts†.....	5	Industrial arts†.....	5
Home economics† (cooking).....	5	Science (physics)†.....	5	Science† (chemistry).....	5
Social studies†.....	5	Home economics†.....	5	Social studies†.....	2½
Science (biology)†.....	5	Social studies†.....	5	Home economics†.....	5
Mathematics†.....	5	Mathematics†.....	2½	Mathematics†.....	2½
Music†.....	5	Art†.....	5	English†.....	5
Art†.....	5	Music†.....	5	Art†.....	5
		English†.....	5	Music†.....	5

†Davis, Calvin O., *Our Evolving High School Curriculum*, p. 212.

The Range of Offerings

Just how great is the range of offerings in respect to the several departments of high school work may be seen from a study made by Dr. Counts showing how fifteen typical American cities distribute their offerings.

SUBJECT	Range	Average Number Units	SUBJECT	Range	Average Number Units*
English.....	4½—10	7	Industrial subjects.....	2—30	13
Foreign language.....	10—14½	12½	Home economics.....	2—11	5½
Mathematics.....	4½—6	5	Music.....	0—12½	4½
Natural science.....	4½—7½	6	Art.....	0—12	4
Social science.....	4½—7½	5½	Physical education.....	1—6	3
Commercial subjects.....	8—16	12	Miscellaneous.....	0—6	1

*Davis, Calvin O., *Our Evolving High School Curriculum*, p. 220.

Analysis of the Several Systems

An analysis of the three Virginia systems presented here reveal wide differences in practices even among themselves. Norfolk, for example, provides a very extensive program of studies and organizes the work within seven distinct curricula—three vocational and four nonvocational. There are few differences, however, to be found in Norfolk's four academic or non-vocational curricula, except as relate to a choice of foreign language or science. In Harrisonburg (which, by the way, is representative of many more of the Virginia cities than is Norfolk) a relatively narrow program of studies is to be found. Here are three academic curricula (differing little one from the other) and one commercial curriculum. In Staunton an exceedingly narrow program is found, with no provision whatever for vocational or non-academic subjects, and affording pupils but very limited choices even among the offerings provided.

A careful analysis of the printed outlines of other cities in the State leads the survey staff to the conviction that the elements of weakness found particularly in the two cities of Harrisonburg and Roanoke are fairly common ones. That is to say that (except in a few of the very largest high schools)

fewer subjects of study are offered in Virginia schools than is the practice generally elsewhere in the country. Further, that the opportunities for pupils to elect freely within the offerings made are much restricted, due to the rather rigid curricular requirements.

The Virginia plan of administering program of studies, it must be confessed, possesses much decided merit. They prevent the dispersion of effort, on the part of pupils, over numerous fields of unrelated work. This tendency towards diffusion is a weakness found all too commonly throughout the country. However, as already stated, the diversity of curricular arrangements made in the schools of Virginia is more nominal than real. Not only are the courses or subject offerings within some of the newer departments of study either wanting entirely or they are given rather scant recognition in time allotment. Further, by restricting the election of the so-called vocational subjects to students pursuing one or another of the so-called vocational curricula the general student (and the student pursuing college preparatory courses generally) is prevented from pursuing even a modicum of this newer type of work. Unless, indeed, the junior high school be found in the system (and there are but twelve of these schools in the State) the rigid plan of administering the secondary school program of studies operates to discourage, if not prohibit, an individual from testing out his real scholarly interests almost completely.

The result of this process is (as will be shown more fully in a later chapter) to cause many pupils either to drop out of school or to pursue courses for which they appear to have no real aptitudes or to seek to fit themselves for careers in life which are today either already over-crowded or which are not the best suited to their natures.

In order to make the situation more definite and concrete, consider the program of studies for Roanoke. Here the following facts are observed:

1. The total number of courses or units of work offered (omitting physical training, which carried no credit) is twenty-six.

2. The units of work given in each department is as follows:

English	4
Mathematics (algebra and geometry)	4
History	4
Latin	4
French	2
Spanish	2
Science	4
Bible	2

3. The constants (subjects prescribed for every pupil) are:

English	4
Algebra	2
History	2
Biology	1

4. Fields from which at least seven units must be selected are:

Ancient history	1
Modern history	1
General science	1
Chemistry	1
Physics	1
Bible	2
Latin	4
French	2
Spanish	2

5. Subjects of study conspicuous by their complete absence are:

Manual training.	Bookkeeping.
Home economics.	Typewriting.
Agriculture.	Stenography.
Mechanical drawing.	Office practice.
Vocational civics.	Commercial arithmetic.
Music.	Commercial law.
Fine arts.	Commercial geography.

A comparison of these data with the figures presented for other cities is sufficient to indicate the relative paucity of curricula offerings made in many of Virginia's larger school systems and suggests the need for enriching their programs of study and for administering them in a manner less rigid than many appear to be doing.

Causes for the Conditions

What appears to be the explanation for the policies revealed in the analysis given? The answer is unquestionably *tradition*. Virginia cities are holding to a program of studies that is largely dictated by the demands of colleges. In doing so the State may unwittingly be thwarting the real interests of boys and girls who are not going on to college or perhaps ought at least to be discouraged from so doing. For certainly a program of studies which does not operate to attract all normal youth of requisite preparation or which, conversely, operates to drive out of the school within a few days after their first enrollment a very large percentage of those who essay high school work cannot be said to be truly democratic, or socially efficient, or perhaps humanly just.

To be sure, if one chooses to accept the educational theory that regards the high school as essentially a selective agency designed to eliminate all but superior pupils from the schools, then a narrow formal type of training is admittedly adapted to that end. With this theory, however, the survey staff have no sympathy. For them, public education, in order to justify itself at all, must endeavor to provide a suitable type of training for each distinct group of individuals. Since, therefore, some individuals are essentially motor minded or artistically minded or clerically minded, and can achieve readily only in the realms of the specific and the concrete, a program of studies which furnishes materials for processes of these sorts is as necessary as a program suited primarily to the needs of those who achieve in the realms of abstractions and generalizations.

Further, Virginia appears to be ambitious to become an industrial and commercial State and to tap the vast sources of material wealth locked up in her streams, mountains, mines, forests, and farms. Such a program calls for leaders in scientific and practical thought and action. It would appear that the high schools ought (more than at present) to be turning out young people trained in scientific methods, conversant with the historical, social and practical aspects of business and industry, and keen to match their abilities with others in helping to advance Virginia's program of civic, material, and scientific expansion. To the survey staff this is not likely to happen readily unless the newer so-called practical subjects are given a place of dignity co-ordinate with subjects of study of older traditional values.

It may, indeed, be questioned whether it is the part of wisdom for Virginia to continue to prepare for college the unusually large numbers of youths so prepared each year. Certain it is that a number of the professions for which college education is designed to prepare are being overcrowded with candidates seeking admission thereto. Some of these pupils are therefore destined to be disappointed in their quests. Disappointment spells not only individual unhappiness and diminution of personal effort, but, because of these results, tends to multiply the burdens and cares of the State itself. Purely, therefore, in the interest of public welfare it is desirable for the

State so to diversify the training of its citizenry that each may the more likely find room for the full exercise of his powers, unhampered by any needless jostling by his fellows.

There is another aspect to the question. It has been repeatedly said that the present generation of youths is not desirous of acquainting itself with the tools of industry and business, but seeks rather to enter what is conceived to be the easier paths of the professions. In this desire they are encouraged by their parents. This brings the reasoning to the same end, however. As stated, the professions are, in many instances at least, already overcrowded. In consequence, only the better fitted applicants are likely to find places. Surely the course of wisdom would lead each individual to desire, first, to test out his own capacities in a multitude of ways, and then to be guided by his testings to a choice of a permanent calling. An enriched program of studies, flexibly administered, conduces to this end.

A Guidance Program

One other topic, closely related to the curriculum itself, calls for mention here. This is the need for providing a thoroughly organized guidance program for pupils. It matters little how rich the offerings or how flexible the curricular administration if pupils have no definite way of learning to discriminate among the opportunities furnished—of learning to pick and choose their work wisely. Much wholesome advice can be given by the principal and by teachers in the regular conduct of their school. No doubt much help of this kind is at present being rendered. But experience seems to indicate that such incidental advice to pupils is not sufficient. There is, in addition, need for the services of experienced counsellors—both for boys and for girls. In some places these individuals are given the titles of deans or advisors, and are expected to render personal aid—individually and through group organization—in all matters pertaining to school, vocation and personal problems.

In reply to a questionnaire sent out by the survey staff and answered by one hundred and eighty-three high school principals, four schools only claim to have such an official as a class advisor and these are members of the faculty engaged, for the most part, in teaching regular classes. Indeed, the survey staff is reliably informed that there is but one school in Virginia that has a dean or counsellor of girls devoting the major portion of her time to the work of that office.

Of the one hundred and eighty-three principals replying to the questionnaire sixty do claim that pupils have discussions and conferences with the principal and teachers, and twenty-one claim to provide frequent lectures by business and professional men and women. The facts of the case are, however, that almost nowhere in Virginia is there a systematic guidance program in operation in the high schools.

Supplementing the work of a school counsellor—or underlying it—should be found in every school a course dealing with vocational civics or occupations. A course of this kind seeks to acquaint youths with types of vocations that are open to them in the United States, endeavors to reveal to them the qualifications needed by individuals in order to pursue these callings successfully, suggests the training that must ordinarily be obtained by one planning to engage in businesses or professions of the kinds considered, and explains the rewards that are likely to accrue to a person who follows any of the specified careers. Such a course should, obviously, be given a place allotment in the early years of the high school course, and should, it would appear, be a prescribed or required course for all pupils. In the estimation of the survey staff Virginia needs very much a program of educational, vocational and life guidance for every school.

State Uniformity of Textbooks

One other phase of the question remains to be considered. That is the question of State uniformity in textbooks. Granted that the practice has many

merits, it is also equally evident that, at times, it works disadvantageously. Communities are not alike. To seek to interpret a fixed course of study through a fixed agency is to double the difficulties of adjusting the work to the real needs and experiences of the pupils. No doubt a superior teacher always does rise above a textbook, but, too often, young teachers—as well as ill prepared older teachers—are slaves to the printed page. By having an optional list of texts for all subjects of study—permitting each principal to select from this list the books that best serve his local needs—would seemingly add much to the efficiency of any course or program of studies. It is probable, too, that the specific courses of instruction that are common throughout most of the schools of the State need thorough overhauling and reevaluating. This, however, is a subject that cannot be treated here. It is a task for each principal, in cooperation with his entire body of teachers, to undertake. Such analysis would no doubt result in a rather complete reorganization of several departments of study. In illustration, such an analysis would doubtless change greatly the work in social studies to be offered in the schools. Experience in many parts of the United States has shown conclusively that ancient history, with all of the details usually included in it, is not a suitable study for the first year of high school. Its subject matter is over the heads of the pupils; its topics too remote in time and place and interest to challenge the mastery of the typical pupil.

A similar analysis of the courses in science would doubtless give to the schools a different type of chemistry and physics and biology from what is taught at present. The same is doubtless true of the courses in English. Indeed, a series of general analyses of these sorts would tend to give a vitalized functioning curriculum.

It is, therefore, the conviction of the survey staff that each city of Virginia should make a thorough study of its own curricular needs and curricular offerings and endeavor, if need be, so to reorganize its work as to make it serve better the real interests of the boys and girls who are entitled to receive instruction in its schools.

The Program of Studies in County High Schools

Much that has already been written respecting the program of studies for the cities of Virginia applies also to the county high schools. Many of these are doing conspicuously good work at the present time, despite the fact that most of them are seriously handicapped in equipment and in teaching personnel. Nevertheless, the county high schools of Virginia are suffering, commonly, from an ill-adapted program of studies. For the most part they have copied the programs of the city schools and consequently have overstressed the formal and abstract phases of an education to the neglect of the more realistic. Individuals differ among themselves in rural communities as much as they do in urban centers. Yet, despite this fact, in most rural schools little or no provision is made to meet individual needs.

The following class schedule for a three-teacher accredited high school as operated during the first semester of the school year, 1927-1928, will indicate the character of the work provided. The total school enrollment is eighty-two. School class periods are fifty minutes in length.

The School Schedule¹

School No. 1

PERIOD	TEACHER A	TEACHER B	TEACHER C
1	Begin geometry (8).....	French II (15).....	English I (28)
2	Algebra II (26).....	Ancient history (17).....	Chemistry (15)
3	Algebra I (24).....	French I (18).....	English IV (15)
4	Commercial arithmetic (16).....	Latin II (18).....	Gen. science (21)
5	.....	Latin I (14).....	English III (17)
6	U. S. history (16).....	Civics (15).....	Biology (23)

Note.—English I is taught by the seventh grade teacher.

¹Numbers in parenthesis indicate the enrollment in the several classes.

The Program of Studies of Another County School

School No. 2

EIGHTH GRADE	NINTH GRADE	TENTH GRADE	ELEVENTH GRADE
*Arithmetic ½.....	*Algebra.....	*Geometry.....	*English
*Algebra ½.....	*English.....	*English.....	*Civil Govt.
*Gen. Science.....	Latin.....	*American history.....	*Arithmetic ½
*English.....	Modern history.....	Home economics.....	*Algebra ½
Latin.....	Bible.....	Agriculture.....	*Biology
Ancient History.....		French.....	French

*Subjects preceded by asterisk are required.

An analysis of these programs and procedures is interesting.

School No. 1, as listed here, graduated twelve pupils last June, eleven of whom entered college in the autumn. School No. 2 enrolled 118 pupils last year, graduated twenty-five, and sent about half of these to college.

It appears, therefore, that both of these schools—typical of the small rural high schools of the State—are essentially college preparatory schools. Youths attending them head for college because, forsooth, they know of no other route to traverse and have no opportunities to travel in any other direction even though they desired to do so. Repeatedly whenever the surveyor of the school asked the question: "What do you plan to do after you graduate?" The reply came from the pupils: "I don't know." When asked categorically if they planned to enter college, from one-third to two-thirds of typical classes replied: "No." When pressed for more definite replies respecting their future hopes, a goodly percentage stated it expected to continue on the farm; another considerable percentage expressed a desire to go into clerical work; a notable percentage seemed to aspire to take up careers as nurses; while a small percentage continued to insist that it did not know what it wanted to do.

And yet, in the face of these inarticulate or suppressed ambitions, no provisions are being made in the two schools mentioned (typical, it must be reiterated, of the county high school generally) for giving these young people even an introductory insight into business practices, industry, nursing, or indeed any specific types of vocations. Neither do these schools provide any instruction in vocational civics, music, fine arts, mechanical drawing, manual training, home mechanics, and (except for one year's superficial course in one school) home economics.

On the other hand, the ancient history work, as observed, was registering no worth while values; the science work was unapplied to the problems of life; and the language work was formal and stilted. Indeed, the observer could but wonder if, in the face of all the local circumstances, the offering of two foreign languages for two years each was justified. When, further, he was told that in one of the schools sixty pupils—more than half of the entire body—were studying French, but that only eleven boys were studying agriculture and only fifteen girls were studying home economics, his wonder grew respecting the forces that are at work to shape ends as they are.

In the estimation of the survey staff there is imminent need in Virginia for a revision of the program of studies for rural high schools. There is need for making all work that is offered function more vitally than it does at present in the real lives that boys and girls are living and must continue to live. Specifically the survey staff recommends that the two-year course in ancient and modern European history give place to a single year of European history; that a course in occupations and in community and vocational civics be established; that the science courses be articulated more closely with the interests and needs of rural life; that at least an introductory course in business practices and book-keeping be provided; that only one foreign language be offered in the very small schools—and that preferably this language be Latin; that home economics be offered for at least two years in every school; that a course in farm and home mechanics be introduced; that some attention be given to drawing and music; and that the courses in English be vitalized by the introduction of more of the features that relate to the practical experience of the pupils pursuing them. There is, of course, no justice in depriving those who honestly desire to prepare for college the opportunities so to do. Contrariwise, however, there is no justice in guiding all toward college doors, when clearly only a portion of the pupils will ever enter therein.

CHAPTER XXIV

THE PUPILS AND THEIR RECORDS

The proof sheets of the annual bulletin for 1926-1927, prepared under the direction of the State Supervisor of Secondary Education, give the following data respecting the pupil population:

Enrolled in four year city high schools.....	19,711
Enrolled in four year rural high schools	31,295
Enrolled in city junior high schools.....	8,121
Enrolled in rural junior high schools.....	196
Enrolled in unaccredited high schools.....	6,044
Total number of pupils pursuing secondary school work	65,367
Total number of boys in accredited schools.....	25,212
Total number of girls in accredited schools.....	34,111
Per cent of total enrollment in accredited schools who are boys	42.5
Per cent of total enrollment in accredited schools who are girls.....	57.5
Total number of graduates, 1927.....	7,361
Per cent of graduates who are boys.....	35.6
Per cent of graduates who are girls.....	64.4

Are the Schools Appealing to Boys?

The above figures call for little comment. The most significant thing about them is that the schools are apparently making a much greater appeal to girls than to boys, the former outnumbering the latter almost in the ratio of 4:3, while the ratio of girls to boys in the graduating class is approximately 2:1. There are, of course, causes for these discrepancies, although the factors are so involved it is impossible to segregate them completely and to evaluate them. There appears, however, to be something in present day secondary education that is making a much greater appeal to the feminine mind than to the masculine.

Perhaps of more significance than the figures of total enrollment and graduation are those relating to the elimination of pupils from grade to grade. Table 25 sheds some light on the situation. From this table it is seen that the distribution of pupils over the four years of school work varies notably when comparisons are made, grade by grade, between Virginia and the United States taken as a whole. Thus, while in the entire United States there is a loss between first and second years of schooling amounting to 9.5 per cent, in Virginia this loss amounts to 15.5 per cent. That is to say, some extraordinary causes appear to be at work in Virginia which produce an enormous student mortality between the first and second years of high school life. Pupils start high school work but do not continue it—at least this is true of very large numbers.

Again there appears to be a second notable decline in enrollment in Virginia at the end of the third year, for while in the entire United States the percentage drops 4.7 per cent at that time, in Virginia it drops 6.6 per cent. Or, stating the entire case somewhat differently, Virginia draws into her high schools proportionately more pupils than does the typical school of the United States, but it is unable to hold them in school as completely. A very large per cent drops out on or before the end of the first year, and of those who do continue relatively large numbers fail to persist to graduation time. Replies to a questionnaire sent out by the survey staff tend to indicate that these results are being noted quite generally in Virginia today.

School Failures

Again the query is: What are the explanations? And again, for the time-being at least, the reply must be: "No one can say definitely." The fact that large numbers are unable to carry the high school work successfully and are consequently "failed" in their courses must account for a considerable number of cases. The annual bulletin of the State Supervisor of Secondary Education gives these percentages by schools. The range is from 0.0 per cent to 83.0 per cent. More specifically of the 359 schools reporting, seventy-one report the percentage of failures in the high school to be between 20 per cent and 30 per cent; twenty-seven report failures to the extent of between 31 per cent and 50 per cent; four report failures to the extent of 51 per cent to 70 per cent; while two report the percentage of failures to be over 70 per cent. All other schools claim the failures to run under 20 per cent.

Stating the facts somewhat differently, it appears that in 104 schools out of 359 reporting the percentage of failures was in excess of 20 per cent. In a recent study of four high schools of Henrico County the average extent of failures was 21.5 per cent.¹

Another Set of Figures

One further set of figures bearing on this same general theme may be presented. Table 26 shows the number of white pupils promoted, failed, and dropped, by grades, in the high schools of the State during the year, 1926-1927.¹ Without analyzing this table completely it may be pointed out that the figures show a heavy loss of pupils between the eighth and ninth grades, and also a relatively heavy loss at the end of the ninth grade. At the end of the eighth grade 17.7 per cent of the pupils enrolled were failed in one or more subjects and 15.3 per cent were dropped from the rolls for one cause or other. In the ninth grade the "failures" amount to 15.6 per cent and the ones "dropped" to 12.9 per cent of the grade enrollment. Or taking the entire five grades reported (it being recalled that in a few cities of Virginia a twelve year system prevails), there were 15.1 per cent of the total enrollment failed and 12.7 per cent dropped. Whether these figures are alarming or not depends very much upon the philosophy of education with which the analyst evaluates them. If the schools are to be rigid selective agencies, then it is inevitable that numerous individuals shall be crowded out of the schools or be forced to repeat certain work they have pursued. If, however, pupils fail or become discouraged because the work has not been adapted to their individual needs, that is another matter and calls for a different treatment. In the estimation of the survey staff the latter is, at least to a considerable degree, the true situation.

What Is Wrong?

These figures are all significant. When throughout the entire State the percentage of failures runs as uniformly high as the data reveal, something is surely wrong. Either the program of studies is too difficult, or pupils are not prepared for the work, or pupils do not apply themselves effectively, or teachers do a poor job with their teaching, or a combination of these factors is operating.

That failures are not restricted to any one type of subject of study is revealed by the replies made to a questionnaire sent out by the survey staff. Perhaps first and second year English, first and second year algebra, first and second year Latin, and first and second year history courses show a greater number of failures than do the other subjects. But this is to be expected, since many more pupils are pursuing those subjects than are pursuing other types of work.

Another way of showing the same general situation just discussed is to be observed by an analysis of Table 27. Here comparisons are made between census figures and enrollment figures.

¹From data furnished by the State Supervisor of Secondary Education.

Who Receive a High School Education?

The legal school age in Virginia is from seven to nineteen, inclusive. The compulsory school age is from seven to thirteen, inclusive.¹ That is, while parents may send children to school at six years of age, they must do so at seven years of age. The compulsory school period ends with the attainment of the fourteenth birthday. Since, too, the elementary school course of study prepared by the State Board covers seven years, it is clear that normally the arrival of a child at the age of fourteen coincides in time with the completion of the elementary school course. Consequently, the high school enrollment in Virginia should, normally, be composed of pupils whose ages range from fourteen to eighteen. In Table 27 allowance of one year is made for retardation and the normal high school age is taken as from fifteen to nineteen, inclusive.

The table shows that only 40.6 per cent of the white children in Virginia who, by the school census, are entitled to a high school education are actually receiving it. In view of the American ideal, "a complete high school education for every normal boy and girl," this percentage appears to be phenomenally low.

It is, however, when one considers the figures year by year that alarm is felt. Thus only 76.6 per cent of all fifteen year old white children in the State were, last year, in school. Making due allowances for many retarded individuals who doubtless were still in the elementary schools and for other exceptional and unfortunate cases the percentage that must have been in the high schools cannot be regarded as being satisfactory.

But the percentage of sixteen year old pupils is even more startling. Here, in what would normally be the second year of the high school, only 52.1 per cent of those who should be in high school are to be found there. Something decidedly disturbing is happening to pupils during their first year in the high school, causing them to discontinue their schooling altogether. Acknowledging the powerful influences of pubertal forces, of native indifference to education, of economic demands for the personal services of youths in gaining a livelihood—still these can scarcely account for the entire mortality record. Clearly there is something within the schools themselves that is causing a part of the trouble. To the survey staff this is due in part to the restricted program of studies found in many high schools, to the lack of vocational and educational guidance of suitable kind, to faulty teaching, and to other factors which will be pointed out later in this report.

The Pupil Load

Usually a full load of work for a normal high school pupil to carry is represented by four studies. Only the superior students are expected to pursue more than this number simultaneously. Nevertheless, an analysis of available statistics and observations in numerous schools reveals the fact that very large numbers of boys and girls are pursuing five and even six full time subjects at the same time. Thus, in reply to a questionnaire to which 183 schools made answer, it was shown that 7,021 pupils were, at the time the questionnaire was made out, pursuing five studies, while 174 were pursuing six. Observations tend to prove also that the less exacting the school is in its standards of achievement the more lenient it is in permitting pupils of all sorts to elect more than four subjects. The final result, of course, is that pupils accumulate their sixteen units for graduation in about three years, finish the school at the age of sixteen, and proceed under the false impression that they have really secured a thorough education. Indeed, the fact that large numbers of pupils are being graduated from the Virginia high schools at very youthful ages should be a cause for regret. Not, of course, that the truly capable pupils may not properly be accelerated, but when, as the observer found, in some small schools, it is no rare thing to have one or more pupils graduate each year at the age of fifteen, the practice needs investigation.

On the other hand, of course, to set the standards so high as to cause numerous failures, and hence repeaters, has little merit. Not only is such a situation

¹Virginia School Laws, Bulletin, State Board of Education, Vol. VI, No. 1, p. 49, ff.

costly in dollars and cents, but it rarely can be justified on educational grounds. Far better, a challenging curriculum with standards that are attainable by most normal children than a formal curriculum that elicits little spontaneous attack. That Virginia has her full share of retarded individuals, even in the high schools, is seen from the fact that in the 183 schools replying to the questionnaire (and mostly small schools at that) 2,567 pupils were reported as being retarded at least two full years.

Student Earnestness and Morale

No sets of intelligence tests were given by the survey staff to pupils in the schools. However, the concensus of judgment of the staff in observing schools actually at work is that, taken as a whole, the high school pupils of the State constitute a high type of individuals. Most of them apparently come from homes of thrift, ambition, and intelligence. Most of them are upstanding, well groomed, and well disciplined.

In certain sections and in certain schools there is a lethargy and a seeming indifference to school work generally, and in altogether too many schools pupils give evidence of not knowing how to study or how to organize the materials which they have studied. Rarely, indeed, did the observer see a pupil take a topic or theme, stand up before his fellow students and discuss the topic independently and straightforwardly in a forceful, interesting, convincing manner. On the contrary, there was an enormous amount of inaudible, halting, uninteresting "reciting" going on. Pupils (and teachers) appeared often to believe that schooling consists essentially in memorizing isolated facts—and, on the whole, they made poor showings in doing even this. No doubt the general adoption of the State Board's recommendation to extend class periods to fifty-five or sixty minutes, with a portion of each hour devoted by the teacher to helping pupils to study the assignments, will prove beneficial. Nevertheless, other improvements, which will be discussed later, are also needed. In the estimation of the survey staff much better educational results will come if more of the emphasis in school is shifted from formal procedures, stressing largely the mere mastery of forms and the attainment of knowledge, to procedures aiming to develop ideas, insights into principles, independent thinking, attitudes, interests, and habits. Indeed, there is need for more of the scientific research methods—the independent delving after new truths and the organizing of these truths into forms of expression that are thoroughly colored by the originality of the pupil. For, surely, high school pupils—as well as pupils below high school age—can undertake research problems and will do so if only their native powers of imagination and curiosity are stimulated and guided by others. It cannot be too emphatically stated that at present there is too little of this spirit manifested in the Virginia high schools.

The Graduates and What They Do

Last year, 1926-1927, a total of 7,361 boys and girls graduated from the high schools of Virginia. Of this number 2,919 entered college in the subsequent autumn.¹ That is to say, 14.4 per cent. of the entire school graduated, and of this number 30.9 per cent entered college immediately. How many more will have entered college a year or so later no data are at hand to state.

The returns from a questionnaire sent out by the survey staff and replied to by 183 high schools, show that in those schools 3,731 pupils graduated one year ago, and that of this number 1,648 entered college in the following autumn. This represents a percentage of 44.2 that entered college. Further, these college entrants distributed themselves as follows:

No. in liberal arts colleges	893
No. in teachers colleges	555
No. in engineering colleges	151
No. in agricultural colleges	49
Total	1,648

¹From data furnished by the State Supervisor of Secondary Education.

In addition to this number who entered college 309 entered commercial schools and 167 entered "other types of schools" not specified. This gives a grand total of 2,124, or 56.9 per cent of the graduating class who continued their education somewhere. It is a fair question to ask, "What became of the others?" but the reply is not at hand. No doubt many entered local business houses, some remained at home assisting in the family activities, and some just dropped out of sight.

It is clear from all of these figures that a goodly percentage of Virginia's youths is using the high school as a college preparatory school. They should, of course, be afforded this opportunity. However, as stated previously, it is evident to the survey staff that many pupils are starting up the college route who have little aptitude for the work that lies at the end, or indeed little aptitude for the work that is preparatory to college admission. They do this, it must be believed, in many cases because they know not what else to do, and have no means of securing impartial advice. They are in high school because it is "the thing to do." Probably most of them should be there—and are better off because they are there. Nevertheless, as stated previously, the survey staff believe much greater benefits would come to many individuals as individuals and to Virginia as a State if school work were adapted more fully to individual needs.

Just as an illustration of what happens to high school pupils in the course of their high school careers there is presented in Tables 28 and 29 two sample cases secured by the surveyor in his rounds of inspection.

Student Collateral Activities

Another essential weakness of many of Virginia's high schools is that they do not make sufficient use of the active interests of young people to do things for themselves. Athletics, it is true, appear to have a hold on most schools. Occasionally, also, something is done by means of rather formal literal society work and clubs. But rarely does an observer find students assuming responsibility for assembly programs, or organized into school councils, or in charge of school undertakings of many other sorts. For the most part these extracurricular activities are either entirely lacking, or they are formal and stilted, or they are governed more or less autocratically by teachers. This is again but another illustration of the general observation that teachers in the Virginia schools do too much and demand or permit their pupils to do too little.

Two other topics may be considered briefly in this chapter. The first relates to tuition charges for pupils; the second to the need of furnishing greater transportation facilities to convey pupils to and from school.

Tuition Charges

The Constitution of Virginia provides that a system of public free schools shall be established throughout the State. The authorities have interpreted this provision, together with other provisions, to mean that elementary education must be free but that high school education need not be. In consequence there are still twenty-five counties in the State that charge tuition fees of all high-school pupils—whether they reside in the district or not. This fee, where levied, averages about three dollars per month for residents of the district and considerably more for nonresidents. The excuse that is given for collecting the local fee is that the district needs the money, that the local property tax is already as great as can reasonably be exacted, and that few parents object seriously to the tuition demanded.

No doubt many communities of Virginia are already heavily burdened with taxation. No doubt, too, that the local school board needs the money. However, in exacting this tuition fee of all its entrants to the high school Virginia is wholly out of harmony with educational procedures in the greater portion of the United States. Everywhere in progressive States today high school education is as free to its constituencies as is elementary education. The charging of local tuition fees is a hangover from the practices of three-quarters of a

century ago. Furthermore, while it may be true that parents very rarely openly object to the payment of the fee, it is positive that many individuals are not sending their children to the high school because of the charge. Sensitiveness may account for the lack of complaint, but where families in only moderate economic circumstances are called upon to pay even the nominal sum of three dollars per month for two, three, or four boys and girls, the burden may not be light.

In justice to its own sense of pride and progressiveness Virginia ought, in the estimation of the survey staff, to wipe all local charges for high school tuition off the books.

Further, good progressive educational administration elsewhere in the Union provides that youths not residents of a given district may, if they choose, attend high school therein and have at least a portion of the tuition fee paid by the school district in which they do reside. The survey staff believe this reform should be made mandatory in its operation.

Transportation

Finally there is the question of transportation. The survey staff believe fully in the policy of school consolidation. However, the abandonment of small local schools carries with it an obligation on school authorities to provide means of transportation for pupils in the consolidated unit. Many counties of Virginia have, of course, done this. Many have not. It was a common occurrence for the observer to see groups of high school children walking from three to ten miles per day to attend school. Many others, of course, furnished their own vehicles for going to and from school. It must, however, be believed that many persons cannot and will not attend a high school if it be located at a long distance from home and no public conveyance is provided to transport them. It is, of course, fully recognized by the survey staff that to provide public transportation for large numbers of pupils is excessively expensive. Neither should any local district be expected to stand the full burden of the expense incident to the inauguration of a complete system of public transportation. There are, however, ways of alleviating the difficulty. One is giving State bonuses and other State aids of specific kinds. The survey staff, therefore, recommend that a study be made of the practices being followed by certain other States of the Union in reference to a policy of State awards for consolidated schools. State awards, coupled with a general policy looking to an equalization of taxation and a just distribution of funds for school purposes will greatly relieve the pressing situation in Virginia.

CHAPTER XXV

THE TEACHING STAFF

According to the figures given in the advance sheets of the annual report of the State Supervisor of Secondary Education in Virginia for 1926-1927, there were last year 377 accredited four year high schools in the State. These enrolled 51,006 pupils and were being taught by 2,170 full time teachers and 212 part time teachers. If the junior high schools be added, the number of schools is increased by twelve, the pupil enrollment by 8,317, the number of full time teachers by 297, and the number of part time teachers by 14.

Considering the full time teachers only the ratio of teachers to pupils is 1:24—a very satisfactory distribution. If part time teachers are also taken into account the ratio is even better.

Distributed on the basis of sex, Virginia employs 741 men on full time and 1,726 full time women. This gives a ratio of seven women to three men. Contrary, perhaps, to expectations this ratio holds approximately the same for the city schools and for the county schools. Moreover, while it might theoretically be desirable to have the two sexes more nearly equal in number (other considerations being the same), the ratio in Virginia is not decidedly different from what it is elsewhere throughout the United States. While it often is said that a strong woman is more to be desired than a weak man in the schools, there is a fallacy in the supposition, since there really is no need for having weak men in any school. Adequate inducements can be made to supply most any needs.

Teacher Training

In 1926-1927, 57.1 per cent of all high-school teachers in Virginia held the collegiate or collegiate professional certificates.¹ The others held special certificates or normal professional certificates. The State board is to be commended on its efforts to advance standards for high school teachers. Certainly the day has arrived for demanding a full college course from any who seeks to give instruction in the high school. The Board, therefore, is to be congratulated on its recent action, which says by resolution: "On and after September 1, 1929, all beginning high school teachers will be certified on the basis of graduation from a four year standard college."

The Board is to be congratulated upon its efforts to prevent teachers from attempting to teach subjects for which they have received no special preparation. To this end, the board proposes gradually to cease giving out blanket certificates, enabling candidates to teach what they will, and to require specialization in one or two limited fields of endeavor. These subject combinations, as tentatively formulated, are nine in number and thus provide ample flexibility for most schools and most teachers to follow. Supplementing its reformulations of subject combinations the State Board has very recently not only drawn suggestive class schedules for the guidance of high school principals, but has also laid down the minimum requirements which candidates for certificates must meet in electing their college work. These requirements include approximately eighteen to twenty-one hours in professional study, as well as ample prescriptions in the major and minor fields. All this, to the survey staff, appears admirable.

Sources of Supply of Teachers

From what sources does Virginia draw her high-school teachers? Table 30 gives the facts.¹ The figures call for no especial comment other than to note

¹From advance sheets of the Annual Report of the State Supervisor of Secondary Education.

that there is a fairly wide distribution of sources—a fact that tends to safeguard dangerous inbreeding.

Growth in Service

It is, of course, not only important that teachers shall enter the service of the schools well prepared, but it is essential that they grow in service. This growth comes through attendance in summer schools, attendance in extension courses, attendance at professional meetings devoted to education, through private reading, through travel, through participation in worth while civic organizations, through club work, through the theaters and in scores of other ways. Do the high school teachers of Virginia take advantage of these means? The answer is: Some do; most do not—at least to the degree that is desirable. In reply to a questionnaire answered by 183 principals and employing something over 1,150 teachers in their high schools, it was stated that 340 teachers attended summer school in 1926, and that 331 did so in 1927. If these represent a total of 671, the situation is gratifying.

Personal conversations with teachers, principals, and superintendents, however, have convinced the survey staff that, in many cases, salaries are so low that teachers have little resources to expend in helping themselves to grow through many of the means suggested above. This topic will be considered later in this chapter. It may, however, be stated that the survey staff believe that if school authorities would encourage continued growth through the giving of bonuses or increases in salaries for succeeding years enhanced values would accrue to the schools as a result of such a policy.

The Teaching Load

Just what should constitute a just load for a teacher to carry throughout the school day has never been scientifically determined. Much depends on local conditions. Much, doubtless, also depends upon the nature of the subject matter taught, the method of teaching it, and the character of the pupils to whom it is being taught. It is conceivable that 150 well behaved and studious pupils may tax the strength and energy of a teacher very much less than twenty-five pupils who are indifferent to school work and disorderly. It is conceivable, too, that a teacher who teaches one or two classes with great enthusiasm, vigor, and effectiveness, may consume in the two class periods more nervous energy and intellectual effort than is done by a lackadaisical teacher in six or seven or eight class periods. Furthermore, what is a large and heavy load for a new and inexperienced teacher may be a relatively light burden for a more mature individual who has for some years been connected with the given school system and is familiar with its routine practices.

While, as has been confessed, there are no positive scientific deductions to guide one completely in weighing the various items that enter into a typical teacher's load, certain generally accepted standards do, nevertheless, exist. Moreover, the practices found in operation in schools known, because of their high quality of the product turned out, to be successful schools, should be accepted for consideration by other schools.

The North Central Association of Colleges and Secondary Schools has established certain standards for judging a teacher's load. These are as follows:

"1. No school whose records show an excessive number of pupils per teacher based on average attendance, shall be accredited. The association recommends twenty-five for a maximum. In general, no teachers of academic subjects should be assigned more than 150 student hours of class room instruction per day, organized in not to exceed six classes per day.

"2. a. The number of daily periods of classroom instruction given by any teacher should not exceed five. The commission will reject all schools having more than six recitation periods per day for any teacher.

b. The minimum length of a recitation period shall be forty minutes, exclusive of all time used in the changing of classes or teachers.

"3. For interpreting this standard in connection with laboratory work in science, and in connection with study room supervision, a double period may be counted as the equivalent of one class room exercise for teachers of academic subjects, provided that no combination of such work amounting to more than thirty-five periods a week be required of any teacher.

"4. For schools having some definite plan of supervised study, not more than five classes per day should be assigned to any teacher. The association advises that the maximum be four."

An analysis of Virginia's schedules of work convinces the survey staff that, except possibly in rare cases, the teaching load for high school teachers is not excessive. Few teachers teach more than five or six periods per day, few have unusually large classes and few have to teach in excess of 150 pupils daily. Certain suggestions for lightening teachers' loads may, however, be pertinent. They are as follows:

1. Providing syllabi of instruction for the several courses. No such printed helps are ordinarily to be found in the Virginia system.

2. Developing a departmental staff organization, with a chairman or head who shall be responsible for staff meetings, group discussions, and the formulation of departmental plans of organizing and administering the work of the staff.

3. Conducting professional teachers' meetings wherein something besides the routine matters of the school are discussed and wherein real stimulation is given the teachers, positive school aims are collectively worked out, definite forms of curricular and other school questions are organized, uniform plans of administrative procedures are agreed upon, and, above all, best methods of instruction, supervision, discipline, and pupil guidance are suggested and formulated. It does not appear that Virginia is doing a great deal to help lighten the load of teachers in these respects.

4. Granting sick leave with pay. In a truly effective school system, teachers are generously excused from service when physically unfit to be present and do not usually have deductions made from their salaries by reason of occasional brief periods of absence. In Virginia, this appears not to be the common practice.

5. Providing visiting days. In an effective school system, teachers are allowed and encouraged to take a "visiting day" once or twice per year in order to observe the work of other teachers or other schools.

The Teacher's Effectiveness

Taken as a class, Virginia has a corps of hard working, technically well trained teachers. As has been shown, large numbers of them are college graduates, and many of them have had a goodly amount of professional training. Many are excellent teachers—they inspire, lead, challenge thought, arouse reactions, drill, test, clarify, and summarize essential ideas in a very happy manner. Some, however, are lacking in many of the qualities that make for good teaching—personality, poise, vitality, enthusiasm, tact, resourcefulness, powers of questioning, knowledge of subject, humor, force, and ability to arouse interest. While, of course, the survey staff observed only a relatively small number of teachers at work, it did observe a sufficient number to give it a sample of what is apparently common to the State. Reiterating again the statement that there is much good teaching going on in Virginia, the survey staff are constrained to mention a few of the common observable weaknesses:

1. Few teachers requested or expected pupils to stand when talking, even at length.

2. Most teachers were doing most of the talking themselves.

3. There was little spontaneous interest exhibited either by pupils or teachers.

4. No attempt was usually made to discover whether teacher's explanations were registering with the class.

5. Pupils gave halting, imperfect replies to questions, and the teacher completed or restated the phrase.

6. Teachers very frequently accepted mere words, words, words, as evidence that pupils had mastered the idea, the whole class period being wooden and dead.

7. Attention was focused on memorization rather than on the development of insights, attitudes, ideals, principles, and applications.

8. Pumping questions were common.

9. Rarely were there class discussions of any topic—merely individual “recitations” of the old order.

10. Teachers were too often very ineffective in expositions and in educating explanations of facts from the class.

11. The law of cause and effect as it interwove itself in the subject matter of the courses was given little recognition.

12. Almost no use was made of maps, charts, graphs, drawings, black-board sketches, and other concrete illustrative material.

13. Summaries of the day's work were infrequent.

14. Applications of principles to present day problems lying within the experience of pupils were rare.

15. Only very infrequently were field trips, or investigations into first hand practical situations, undertaken.

16. Assignments, though often made with thought, lacked the challenging, motivating appeals.

17. Pupils were frequently permitted to be seated in a manner little conducive to class unity.

18. Dash, enthusiasm, spirit on the part of pupils and teachers alike were altogether too frequently conspicuous by their absence.

Salaries

There is no question more vital to the cause of education in Virginia than that relating to salaries. On the whole, the salary schedules in the State are low—lower, indeed, than can be justified on any basis whatever. True it is that even with the existing scales of wages Virginia is securing teachers who technically meet the accepted standards. As already shown, large numbers possess a college degree and the standard number of hours in professional work. But formal standards do not encompass the entire range of desirable attributes in a teacher. They do not include personality, vitality, force, enthusiasm, drive, and ability to get results. So long as the supply of teachers greatly exceeds the demand and so long as school authorities regard a “cheap” teacher as an economical bargain for the district, poor teachers will fill many of the places in the high schools of the State.

According to the data contained in the proof sheets of the forthcoming annual report of the State Supervisor of Secondary Education, the median salary for city high school teachers last year was \$1,334.70; for rural high school teachers, \$1,152.90; for city junior high school teachers, \$1,440.00; and for rural junior high-school teachers, \$1,357.92. These medians, however, scarcely tell the entire story. They, in most instances at least, include the salary of the principal, who is in Virginia much better paid than the class room teachers. They also, it appears, include the salaries of the Smith-Hughes teachers, who as a group are much better paid than the typical class room teacher.

It is a fair question, of course, to ask, “How much should the salary of a teacher be?” Clearly it should enable a teacher to live wholesomely and comfortably in the neighborhood where she is located and should enable her to lay aside something for savings accounts. Further, it must be remembered that even though a teacher may be paid for only nine months' work, she is compelled to live on her income for the entire twelve months. Rarely are teachers so situated as to add greatly to their income during the summer months. Quite likely they are at increased expense at that time—especially if they engage in travel or attend summer schools, or otherwise seek specifically to use the period for self improvement.

ment. Consequently, a teacher's compensation should be considered on a twelve month basis.

A number of scientific studies have lately been made seeking to compute a teacher's necessary expense. Clearly these vary with the cost of living in different sections of the country. However, it has been discovered, if the monthly expense for room, board and local transportation be taken as a base, these items will represent almost exactly 50 per cent of the total monthly charges, leaving the other 50 per cent to cover such items as clothing, books, dues or fees to professional organizations, medical and dental services, laundry, charities, religious work, recreational activities, etc., etc. If, then, the monthly fixed charges for the three items be doubled, the sum multiplied by twelve (to give the cost of living for the entire year) and an arbitrary sum of \$300 be added for savings account, a near approximation to a reasonable salary schedule will be reached.

As salaries for other types of work go in Virginia, it may be that teachers are being paid proportionately well. When, however, one finds—as the surveyor did find—that men with collegiate training and with families to support were receiving in some places as low as \$105 per month for a nine month's term, the financial situation seems to be in need of improvement. For the old maxim still holds good: "As is the teacher, so is the school." And superior teachers cannot, it must be believed, commonly be secured for a median sum of \$1,152.90 per year, even in Virginia. For in order to secure a median it must be remembered, as many must be below as above the figure given.

CHAPTER XXVI

THE HIGH SCHOOL PRINCIPALS

Inasmuch as the subject of school principals is dealt with at length in another division of this report, little need to be said about that office here. Three questions will, however, be raised, as follows:

1. What are the principal's functions?
2. What does he actually do?
3. What are his training and his salary?

In Bulletin of the State Board of Education, Volume VI, No. 1 (July, 1924), one reads:^L

"The high school principal holds a position of strategic importance in the school system;—is responsible to the superintendent and local school board for the successful conduct of a single school. While it is the function of the superintendent to plan and lead and that of the principal to execute plans and to follow and support, the principal should pass on the details and matters of a local nature as far as possible and relieve the superintendent of as much responsibility in connection with his school as practicable. And the principal who has had a reasonable tenure of office should be given the further privilege of helping in the selection of his teachers, and should be encouraged to make suggestions in regard to policies and regulations for his school."

This, to the survey staff, is an admirable and just statement of the functions of this important office.

In its regulations pertaining to the accrediting of schools, the State Board states that at least two class periods per day shall be left free for the principal to use in the supervision of the instruction of his teachers. This, too, is a desirable regulation.

How far, however, do principals live up to this standard? There is considerable evidence that goes to convince the survey staff that few approximate very closely the ideals set—especially on the side of classroom supervision. The principal is so engrossed in managerial matters—in putting the schedules into operation, keeping records, conducting assemblies, coaching athletic teams, disciplining pupils, interviewing callers and teaching much of the day—that he has little time to aid teachers in the real work of the school. Granted that the task of supervision of instruction is a technical one and that few individuals are trained to carry on the work with a high degree of skill, nevertheless, for most schools, the principal is the only one to whom patrons and others may generally look for help of the kind mentioned.

Every young teacher, at least, needs the sympathetic advice of more experienced persons in planning and conducting the work of her classes. Considerate supervision and courageous admonitions from the principal in the early days of the school year will frequently save from failure a new teacher. Even the principal's casual visits to her class will tend to challenge a teacher's resourcefulness and cause her to exert herself as she might otherwise not do. The holding of frequent personal conferences with her in which the work is gone over in detail is beneficial. Teachers' meetings for the entire staff of teachers yield much aid—especially if they be utilized for professional purposes and not merely for routine matters.

The survey staff found some principals filling their positions as completely as circumstances would permit. Also other principals were found who clearly were not doing so. In particular the staff would call attention to the need for providing principals with adequate facilities for their work—suitable offices, adequate clerical help, desk equipment, and similar aids. But especially would the survey staff urge upon principals the need for giving greater and more constructive supervision of classroom teaching.

Under a recent ruling of the State Board no person may, in the future, become a high school principal unless he possesses a collegiate degree, has received training

in the principles of school administration, and has actually had two or more years of teaching experience. The survey staff commend this ruling.

The normal length of time a principal remains in a given position in Virginia is 2.7 years.¹ Each individual is, apparently, seeking to better his condition economically, socially or professionally. A certain amount of dissatisfaction with one's achievements is, no doubt, to be expected and is probably beneficial. Nevertheless, no very comprehensive school policy can be worked out or put into effect in the short period of two or three years. In the estimation of the survey staff the office of high school principal should be stabilized and dignified to the end that good men may be secured and then retained in chosen positions for longer periods of time. Attractive salary schedules, with provision for annual increases to those who continue to grow in the service, will conduce to these ends.

Range of Salaries for Principals of Accredited Four Year High Schools in Cities and Counties Combined

Salary	No. principals receiving
Under \$1,200	8
From \$1,200 to \$1,499.....	80
From \$1,500 to \$1,999.....	156
From \$2,000 to \$2,499.....	79
From \$2,500 to \$2,999.....	29
Over \$3,000	18
Not reporting	7
Total	377

The foregoing shows the range of salaries for high school principals at present. The norm is considerably under \$2,000. It can scarcely be expected that schools can, for that salary, secure and hold a high type man, perhaps with a family depending upon him, eager to grow and to play an active part in the educational, civic, and social life of the community. School salaries must be made as attractive as the salaries paid for comparable positions in other walks in life.

The survey staff take occasion also to commend the recently inaugurated custom of having the State Supervisor of Secondary Education hold conferences with groups of principals throughout the year and to discuss with them the vital problems of common interest. No more promising supervisory agency has lately been developed than this.

¹From a recent study by Dr. W. R. Smithey.

CHAPTER XXVII

SCHOOL BUILDINGS AND EQUIPMENT

In Division X of this report there is a detailed discussion of the school building situation in the State. But from personal observations made in the several trips of inspection throughout the State, the survey staff wish to say here that, as in other States, school buildings that have been erected within the last few years are, for the most part, spacious, safe and possessed of many features of modern school architecture. Most of these newer buildings are provided with an auditorium and some have gymnasiums, shower baths, cafeterias and similar attachments.

However, when attention is called to the older school structures, a disheartening sight often meets the eye. Not only are many of these buildings wholly without modern improvements but they, too often, are not kept in even decent conditions. Many of them are dark, dingy and inexcusably dirty. Wall plaster and wall paper frequently hangs in great patches; window glass is broken out; window shades are in tatters, askew or lacking altogether; basements are cluttered up with discarded school benches, rags, old stoves, and junk of various kinds. There is no art of any sort to be found anywhere. The principal's office is often the receptacle for hastily abandoned football togs. Toilets emit a nauseating odor. The library is a hole in the wall. The principal's office and most class rooms are imperfectly lighted and ill-ventilated. Paper and other refuse litter the stairs and the school grounds; laboratories are in a condition of disorder; playgrounds (if they exist) are uneven and their usefulness often spoiled by the existence of boulders, boards and other obstacles.

This is, indeed, a dreary picture to sketch. While it does not characterize the majority of the older schools, it does characterize many of them. Moreover, parts of the indictment would apply to almost any one of the very old structures. There is, in general, in the Virginia schools a lack of appreciation for the aesthetic. And the woeful thing about the situation is that this condition is needlessly allowed to exist. Young people of adolescent age are sensitive to beauty and order and system. They, however, need to have examples of these forces set them. Moreover, they need to have their own potential interests in beauty organized and set to work. Under the leadership of an energetic principal it ought not to be difficult to arouse a school and to have it clean up its own playground, decorate its own school walls, keep its own property in tidiness and order, and generally to develop a taste for things wholesome.

Gymnasium and Athletic Fields

Training for leisure time is one of the cardinal objectives of education today. As stated above, many school communities that have recently erected new buildings have recognized this fact and have provided reasonably adequate facilities for carrying on the undertakings. Many, however, have made no provisions. It is particularly regrettable that certain boards of education have not purchased available nearby sites for playground spaces before the rise in prices or the preoccupation of the land for other purposes makes the acquirement prohibitive. The survey staff urge that attention be given to this important matter wherever facilities are not already adequate.

The Library

Here, as in respect to other aspects of school work, no sweeping generalizations can be made. Some high schools of Virginia provided fairly adequate library facilities. Most of them do not.

The surveyor in his rounds of inspection not infrequently found the library room to consist of a dingy little side room or hole in the wall, and the door locked. Why the door should have been kept locked was something of a mystery since

often the library itself was so small that it would not have been noticed. Further, in numerous instances the books that were on the shelves were so old, worn, or ill adapted to school needs that none but an antiquarian or junk dealer would have much use for them. Further, there is ordinarily no library fund by which to purchase new books. It is true the State does contribute ten dollars, provided the local school authorities will contribute fifteen dollars and an additional sum of fifteen dollars is secured in some private way. Even with this opportunity before them, it appears that few schools—particularly in rural districts—take advantage of the plan.

Again, in almost no small school is there a trained librarian. Frequently a teacher or some teachers assume charge of the supervision of the books and delegate the actual work of the library to some students.

Occasionally—in the larger and more progressive schools frequently—the library is used for reference purposes by pupils, but inquiry failed to reveal that any large numbers of books were being drawn out by pupils merely for the sake of reading for pleasure or personal interest. In other words, the library appears not decidedly to be developing reading tastes among pupils. Nor can this be wondered at greatly, since the books available are often so limited in the range of their appeals and are ill-chosen for high school pupils.

Similarly, few schools—even among the middle sized ones—make provision for furnishing an adequate supply of current magazines, newspapers, and other publications. An exception to this statement must be made wherever really fully developed courses in agriculture were found. In these rooms bulletins, in particular, are usually plentiful.

It is the judgment of the survey staff that it should be obligatory upon all high school districts to set aside for library purposes each year a sum of money equal at least to fifty cents per pupil enrolled, with a maximum expenditure, possibly, of one hundred dollars. The survey staff further is of the opinion that in every high school enrolling more than 150 pupils there should be employed a trained part time librarian. This matter is discussed in detail in Division X.

The Laboratories

What has already been said of the library applies generally also to the laboratories in the typical high school. Some are attractive, well stocked and adequate. Many are poorly situated, poorly stocked, and inadequate. In the larger cities of Virginia, physics is usually taught along with other sciences. In most of the smaller and middle sized schools, physics is not taught, the chief reason for its omission from the program of studies being that physical apparatus is so expensive. There is, of course, some justification for this contention. Moreover, if the other courses in science are properly provided for, it may not be an unpardonable sin to leave physics out of the program—although surely it is an indispensable course for pupils of certain types of mind aspiring to certain kinds of life work.

But taken as a whole, the science laboratories of most of the smaller schools inspected are nothing about which to boast. Many are lacking in spaciousness, many are untidy, almost all are without adequate equipment. Here again it must be said,—it is not possible to run a modern high school effectively without adequate funds.

Music and Art

As shown elsewhere, music and art in the high schools of Virginia are, for the most part, conspicuous by their absence. Hence there is no equipment for either. One exception to the statement must, however, be made. Many schools do encourage music teachers, usually not otherwise connected with the schools, to give private lessons within the high school building. In such cases a room, together with other equipment, is provided—though pupils pay individually for the instruction. This may be a desirable procedure—at least there is no reason for the survey staff to condemn it.

Practical Arts

As pointed out elsewhere, courses in home economics, manual training, home mechanics, automobile mechanics, and (except in the case of Smith-Hughes people) agriculture are not commonly found in Virginia high schools. Consequently no material provisions are made for teaching them. As already stated, too, this condition, in the estimation of the survey staff, is unfortunate. Every school of any considerable size surely should make some provision for work of these sorts—and consequently should equip rooms for carrying on the work.

Physical Education and Health

Inasmuch as another division of the survey deals in detail with the question of physical education and health, little need be said here about these matters. The observer noticed that, in most places, the physical training work consisted largely of calisthenic and breathing exercises. Happily most of this work was conducted out of doors in the open fields. Sometimes, too, the work took the form of free play and competitive games. The survey staff has no fault to find with this program, but it was not convinced that much direct instruction in health was being presented. If, however, this question is adequately treated in courses in general science, biology, home economics, and elsewhere, there perhaps is no great need of demanding it as a part of the work in physical training. At best, however, few of the smaller schools have equipment for the adequate teaching of a health program.

The school as a Community Center

Happily most school buildings are now being utilized as community centers for gatherings of the entire district. To this end, some (not many) are installing motion picture and stereopticon machines, radio outfits, phonographs, and other means of contributing to the larger purpose of community welfare. All this is to be commended.

CHAPTER XXVIII

SUMMARY AND RECOMMENDATIONS

It has been shown that the movement looking to the establishment of free public secondary schools in Virginia is of comparatively recent date, that the first efforts at their inauguration resulted in the building of numerous small, weak schools located in close proximity to each other, that later efforts have been directed to the consolidation of many of these weak schools and the development of strong well equipped ones in their places, that Virginia has been confronted with economic and social situations that have tended to hinder her public school development, but that, in spite of all handicaps, the State has forged ahead and today has a secondary school system which is not only in reasonably good condition but which gives promise of steady development in the future. In arriving at this judgment the survey staff are not unmindful of the fact that many weak spots continue to exist here and there in the system but that most of these are remediable. The staff, therefore, in concluding their report on this division of the survey desire, in brief summarizing form, to reenumerate the items in their findings and to reemphasize their judgments in respect to them.

1. The survey staff commend the policy of consolidating as many as possible of the small, weak secondary schools and recommend the continued extension of that policy wherever circumstances make the procedure feasible.

2. The survey staff believe that the people of Virginia have not yet fully sensed the significance of the expression "free public secondary education," and do not have a clear notion of the aims, purposes and functions of the high school as a social and economic agency. These objectives require that a suitable differentiated education be provided for all the children of all the people. This means the taking into as full account as possible individual community differences and the adaptation of the work of the schools to these differences. The survey staff therefore recommend that the responsible educational authorities continue to seek to present to the citizens of the State the newer conceptions of what modern secondary education really requires and to continue to advise them how these newer ideals may be realized.

3. The survey staff believe that ultimately the 6-3-3 plan of school organization will be found most advantageous for urban communities everywhere and recommend the gradual extension of the idea in the cities of Virginia. Also, the staff believe that many of the essential features of the junior high school can be and ought to be incorporated in rural high schools. In particular, the staff believe that a transition period, at least a try-out year, ought to be provided for rural high school pupils before they definitely are permitted to elect specialized curricula in the senior or four year high school.

4. The survey staff favor the general adoption of the sixty minute class period and commend the State department for its efforts to secure its effective utilization.

5. The survey staff believe that the existing program of studies in many schools is not as modern as it should be and that it is being administered in rather too inflexible a manner to meet the individual needs and differences of many pupils. Indeed, the survey staff feel that tradition is still playing a very large part in the work of the Virginia high schools, that these schools are keyed somewhat too closely to college entrance requirements, and that they may not be fully meeting the best interests of youths not interested in preparing for college. The survey staff therefore recommend that school people throughout the State shall organize themselves into curriculum committees, with a view to making a study of local conditions and providing programs of studies that shall best meet these needs. In order to provide the initial forms for such an analysis as this, the survey staff have presented in some detail contrasting

curricula taken from representative cities and towns and a careful study of these data (as well as of other data) should be made.

6. The survey staff believe that for schools of reasonable size, located in typical districts, it is exceedingly unfortunate that offerings of the following sorts are not commonly provided and (at least in their introductory aspects) are not made available for most pupils, namely: home economics, commercial work (bookkeeping, stenography, typewriting, office practice, and other branches), manual training, home mechanics, automobile mechanics, music, and fine arts. The survey staff therefore recommend that these subjects shall be given a coordinate place in the programs of study of most typical high schools.

7. The survey staff commend the practice of the schools in providing definitely outlined curricula leading to fairly distinct goals of activity, but the "elective" courses provided for therein should ordinarily include a greater range of subjects than is customary in most schools.

8. The survey staff believe that but few high schools of Virginia—and possibly but few teachers within those schools—are really aware of the full significance and importance of the modern scientific movement and modern scientific methods of dealing with life's problems. The staff therefore recommend that schools shall be impregnated with this newer spirit of scientific research and of scientific procedure as fully as possible.

9. The survey staff are convinced that one of the most serious defects in Virginia high schools is the lack of any systematic means for giving advice and aid to students in respect to personal matters, educational problems, or vocational choice. It is therefore recommended that provision shall be made, by law if necessary, for training teachers to undertake this important kind of school work, and that schools shall be required to institute some definite guidance program.

10. The survey staff believe that, frequently at least, a rigid adherence to sets of uniform textbooks works to the disadvantage of pupils, teachers, and communities. In consequence, it is recommended that legal provision be made (if such is needed) to permit of the adoption of optional lists of textbooks, thus giving principals and teachers the opportunity to select books that are the best adapted to their local needs.

11. The survey staff are convinced that many courses of instruction, as now organized and taught in Virginia high schools, should be overhauled and revised. The survey staff therefore recommend to school authorities the reexamination of the courses they are teaching, and, if need be, either the substitution of different courses or the reorganization of the ones being offered at present.

12. There is imminent need for the reorganization of the program of studies for rural high schools. The work in these schools is too rarely adjusted to the interests and ambitions of the pupils attending them. The survey staff therefore recommend that the following specific changes be made in the curricular offerings of these small schools, namely:

- (1) That a one-year course in European history be substituted for the more detailed two-year course.
- (2) That a course in vocational civics or occupations be introduced.
- (3) That the work in English, science and the other subjects of
- (4) That only one foreign language be taught.
- (5) That a two-year course in home economics be taught.
- (6) That a course in farm and home mechanics be offered.
- (7) That some attention be given to instruction in drawing and music.
- (8) That the work in English, science and the other subjects of study be vitalized and adapted to the real needs of the pupils pursuing them.

13. It is evident to the survey staff that the high schools of Virginia are not succeeding in interesting large numbers of the pupils who enter. In particular there is a notable dropping out between the eighth and ninth grades (the first and second years of the high school), and here, too, the greatest numbers of failures are recorded. Further, the high schools appear to make less of an appeal to boys

than to girls, although of those who do graduate more boys than girls have prepared themselves specifically for colleges. It is therefore the judgment of the survey staff that the first year of high school is either too difficult for many pupils, or that it is not suited to awaken their interest, or that pupils have not been adequately prepared to take up the particular kinds of work that are usually to be found in the beginning year of the high school, or that teachers are not skillful in ministering to the needs of the youths of these years, or, probably, that the difficulties are the result of a combination of these factors. In view of this situation, the survey staff recommend that further careful studies be made by the school people of Virginia bearing upon each of the questions herein involved, and that in the light of their findings new policies of school procedure be adopted.

14. The survey staff are convinced that in many schools—more particularly in the smaller schools—too many pupils are being permitted to carry simultaneously five or six full time subjects of study. The staff make no criticism of this practice when it is limited in its operations to pupils who are really superior in their mentality and their scholarship. Too often, however, the spreading of a pupil's interest over too many subjects means superficiality of attainment in all of them. Further, the practice of allowing pupils to earn five or more units of credit each year tends to cause many of them to finish high school at too youthful an age.

15. The survey staff believe that there are among many pupils rather low standards of scholarship and rather indifferent efforts being directed toward attainments. Granted that one outstanding cause of these conditions is the spirit of the age, the survey staff still believe that the preponderance of formal procedures within the schools is also a potent cause of the trouble. The staff therefore recommend that supervisors and teachers consider seriously the question of vitalizing class room procedures and act accordingly.

16. It is evident to the survey staff that the Virginia high schools are being utilized, to a very high degree, as schools preparing for admission to institutions of higher learning. Consequently, the intellectual routes made available for pupils are, in many schools, too limited in number and too restricted in kind.

17. It appears to the survey staff that a fairly large program of extra-curricular activities is desirable for a modern high school to have, but that few schools—particularly the smaller and middle sized schools in Virginia—give sufficient attention to this matter. The survey staff therefore recommend that local school authorities take under advisement the question of ways and means of providing adequately and suitably for this phase of high school work.

18. To the survey staff it appears incongruous that in this early part of the twentieth century, anywhere in America, local tuition fees should be charged for high school instruction. Further, it is good policy for school districts to pay the tuition fees of their own pupils attending high schools in other districts—provided the local district cannot furnish equal advantages as conveniently. The survey staff therefore recommend that legislation be enacted whereby every youth in Virginia may have the advantages of free public high school education.

19. The establishment of consolidated high schools has made the question of daily attendance for some pupils a difficult one. Few local communities can bear the expense of furnishing free transportation for all. And yet justice demands that, in many cases, some public means of getting pupils to and from school shall be provided. The State should contribute largely to this cause, since essentially education is a State function rather than a local district function. The survey staff therefore recommend that a study of the possibilities of providing State aided transportation facilities for all needy pupils be undertaken and that some remedial legislation be outlined by the State Board of Education.

20. The survey staff recognize the difficulties incident to balancing the high school teaching staff with equal numbers of men and women, but is, nevertheless, convinced that, as nearly as possible, this should be done. The staff

believe, further, that adequate financial and professional inducements will tend to secure more men for the service, and recommend that, where needed, such a policy be put into effect.

21. The survey staff congratulate the State Board of Education in its efforts to advance the academic and professional qualifications of teachers and recommend that the policies already inaugurated with these ends in view be continued and extended.

22. The survey staff believe there is danger in securing high school teachers, in great preponderance, either from among local high school graduates or from single institutions of higher education. The staff therefore commend the general policy of school authorities in selecting teachers from a wide range of high grade training institutions.

23. The survey staff are gratified that goodly numbers of Virginia's high school teachers are continuing their academic and professional training by attendance on summer schools. The staff, however, finds that many do not feel financially able to do so because of the small salaries received. The staff therefore recommend to school authorities the consideration of a plan whereby growth in service may be stimulated through the giving of bonuses or increases in salaries to those seeking systematically to grow in service.

24. The survey staff do not consider the teaching load, as commonly distributed in Virginia, to be excessive, and commend the authorities on their standards set up in respect to this matter. However, it is recommended that, where not already employed, the following aids in lightening teachers' loads be considered for utilization:

- (a) Syllabi of instruction.
- (b) Departmental staff organizations, with staff meetings held for the sake of discussing effect procedures.
- (c) Professional teachers' meetings.
- (d) Sick leave absence, with pay.
- (e) Visiting days for teachers.

25. The survey staff regard the effectiveness of the teachers of Virginia as not dissimilar to the effectiveness of teachers generally. That is, there is a number of excellent teachers, a few very weak teachers, and a notably large number of moderately good teachers. The staff believe the chief function of class room teachers to be to inspire and lead pupils, challenge thought, arouse reactions, drill, test, expound, summarize, point out applications, and motivate new attacks upon problems. To the achievement of these ends the survey staff recommend that superintendents, principals, and teachers themselves take measures to secure from the teachers corrections of the following somewhat commonly observed weaknesses:

1. Failure to have pupils stand when taking part in class work.
2. Teachers doing much of the talking.
3. Failure to develop much spontaneous interest during class periods.
4. Failure to check the values of teachers' expositions.
5. Failure to require straightforward, complete treatments of topics by pupils.
6. Acceptance of words for ideas.
7. Stress on memorization rather than on insights, principles, attitudes, ideals, and applications.
8. Ineffective questioning.
9. Failure to utilize class meetings as occasions for discussion periods.
10. Ineffective expositions and the unnecessary relating of "facts."
11. Ignoring the law of cause and effect as it operates in human affairs and nature.
12. Failing to utilize maps, charts, blackboard sketches, and other material aids to instruction.
13. Failure to develop a good summary for each day's unit of work.
14. Failure to apply principles to realities known to pupils.
15. Failure to make use of field trips, or other means of securing first hand experiences related to the subject in hand.

16. Failure to make the assignment an interesting, stimulating, challenging thing.
17. Failure to seat the class so as to secure unity of effort.
18. Failure to inject enthusiasm, spontaneity, or spirit into the work of the hour or day.
26. The survey staff regard the customary salary schedules as they at present operate in Virginia as being disproportionately low, and recommend a revision of schedules more in keeping with those of other States and with those of business positions of comparable kinds.
27. The survey staff commend the efforts of the school authorities to make the office of high school principal one of greater dignity, responsibility, and effectiveness. The staff, however, recommend that this officer shall be encouraged and expected to devote more time and attention to the task of classroom supervision than he ordinarily does at present.
28. The survey staff commend the recently inaugurated policy of having the State High School Supervisor conduct group conferences with high school principals and recommend the continuance of that policy.
29. The survey staff deplore the fact that so commonly in the schools of Virginia the aesthetic side of education is being neglected, and recommend that all school agents shall endeavor to inject more of the elements of beauty into school buildings, school surroundings and school work generally. In particular the survey staff recommend that art work be encouraged and that art pieces for decorative purposes be multiplied; that music be given a more conspicuous place in school programs; that greater attention be given to cleanliness, order, and system about school grounds and buildings; and that the school children themselves be organized into agencies for developing and fostering aesthetic interests in the school and neighborhood.
30. The survey staff believe in school playgrounds and gymnasiums, and recommend that where these have not been provided school authorities take immediate steps to provide them.
31. The survey staff deplore the fact that library facilities are so inadequate in many schools and recommend legislation which shall provide for each school each year a library fund equal at least to fifty cents per pupil, with a maximum limit, possibly of one hundred dollars, as a required annual expenditure.
32. The survey staff recommend that more adequate laboratory equipment for science courses be provided in schools where such is obviously inadequate.
33. The survey staff believe firmly in work in practical arts, both for boys and for girls, and recommend that suitable facilities be provided in all schools for this work.
34. The survey staff are pleased to note the extent to which school buildings are being utilized as community centers, and recommend that the practice be extended. It further recommends that, wherever feasible, school buildings be fitted with radio, stereopticon, moving picture machines, reading rooms and other agencies which conduce not alone to community center interests but to the regular work of the school as well.
35. In the opinion of the survey staff public education is a State affair and not primarily a local matter. In consequence not only should the State exercise large powers of direction over schools but it should also expect to contribute largely, from State funds for their support. While most of the recommendations made by the staff in this division of the report have not called specifically for additional monies by which to put them into operation, it is clear to the survey staff that fundamentally the advancement of the high schools of Virginia is dependent upon larger financial school budgets. Money talks. Money alone can bring many of the modern improvements to the schools, just as money alone can bring many of the modern improvements to business firms, factories, transportation companies, homes, and other undertakings of human beings. Furthermore, there appear to be many sources of undeveloped natural wealth and of unorganized potential industrial achievement in Virginia. These sources ought to

be tapped. Education is one of the means—and perhaps the greatest means at our command—for tapping them and utilizing them. In consequence, education not only pays but it is almost alone the cause of all the other activities that pay. Hence it follows that the larger the sums of money a State expends on education the larger should be the economic and cultural returns from its investments and its natural resources. In consequence of these facts the survey staff recommend that larger appropriations be set aside by the State for developing and continuing high school education for all its young men and women. The specific ways and means for doing this are presented in other divisions of this report.

DIVISION IV

**Higher Education
(Exclusive of Teacher Colleges)**

CHAPTER XXIX

HISTORICAL BACKGROUNDS AND PRESENT STATUS

Probably no other State in the Union has cause to feel so proud as has Virginia of the historical settings of her higher institutions of learning. Many of the earlier Presidents of the United States, justices of the Supreme Court, leading figures in Congress, and distinguished men of letters were educated in these colleges. Throughout the decades since the early beginnings, these institutions have kept up their service of pouring into the citizenship of this country leaders in all walks of life. To whatever institution in Virginia one may go, he has pointed out to him ancient landmarks, evidences of the one-time presence on the campus of national figures, or monuments erected to great heroes who have graced the college halls. These are valuable traditions, and no study of higher education in Virginia can disregard the precious heritage which has come down to each of these colleges from a glorious past.

The University of Virginia

Following the period from 1803 to 1816, when Albemarle Academy existed on paper only, Central College was authorized by the General Assembly in 1816 to take over all the rights of Albemarle Academy. The Board of Visitors consisted of Thomas Jefferson, James Madison, James Monroe, Joseph C. Cabell, David Watson, and John H. Cocke. In 1817 Jefferson was elected rector of the college, and a farm near Charlottesville was purchased as a site for the college. From 1817 until 1826, when Jefferson died, he was the dominating and directing power of the university, which in 1819 was designated by the General Assembly as a university for the State of Virginia to replace Central College.

The beautiful and unique arrangements of the buildings around the lawn, with professors' houses flanked by students' rooms, and with a central library to serve them all, represents Jefferson's conception of a university. The architecture is the result of Jefferson's extensive study of European buildings. The organization of the university and its government, discipline, and methods of instruction were virtually prescribed by Jefferson. The faculty, under the leadership of a chairman elected by them, governed the institution without a president until 1904. Students were free to elect studies from whatever departments they wished, and this principle of free election was much later adopted by most of the colleges of the country. The honor system, for which the University of Virginia is so widely distinguished, has operated efficiently and uninterruptedly since 1842.

The University of Virginia has now grown to be an institution with approximately 2,100 students during the regular year, in addition to a summer quarter of about the same size, extension courses enrolling about 300, and a training school for nurses of about 100 students. It consists of the College of Arts and Sciences for men; and the Department of Graduate Studies, the Department of Education, the Department of Engineering, the Department of Law, and the Department of Medicine, all admitting both men and women. Nearly half of the students in the university come from outside the State. Its faculty consists of approximately 120 professors of the various ranks, forty-five instructors, and one hundred fellows and assistants. Some of these in each of the ranks give only part time service to the university.

The Virginia Agricultural and Mechanical College and Polytechnic Institute

In 1872, ten years after the passage by Congress of the Morrill act, the Agricultural and Mechanical College was opened to students. Its development has followed the general plan which has characterized land grant col-

leges throughout the United States, except that, unlike many, it confined its instruction until 1921 to men students. The Federal grant under which the college was created sets forth its purpose in the following words: "The endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislature of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." Dominated by this definition of purpose, the college has taken for itself a definite field of work in agriculture, engineering, business administration, and the applied sciences.

The Virginia Polytechnic Institute, as it is universally known in Virginia, has now an enrollment of something above 1,200 during the regular year, in addition to a summer quarter of about 200. Of these, approximately 200 are in the Department of Agriculture, 650 in the Department of Engineering, 260 in the Department of Business Administration, and 100 in the Department of Applied Science. Relatively few students are enrolled in the institution from outside the State, the latest figures showing 1,097 from Virginia, out of 1,224 as the total enrollment.

The faculty consists of approximately 115 professors of the various ranks, 35 instructors, and 29 assistants, including part time student assistants. This faculty includes those who have academic rank but who are working in the experiment station and extension division. A number of them, therefore, give only part time to the instruction of students.

The College of William and Mary

Chartered in 1693 by the English King and Queen, whose names it bears, the College of William and Mary was the second college established in this country. In early colonial days this college served both the pioneer settlers and the Indians. Its early presidents were mainly ministers. In 1776 Phi Beta Kappa, the first and most distinguished of all Greek letter fraternities, was founded. Among the men whose names stand out in American history, many were enrolled in their youth as students at the College of William and Mary. These include three presidents of the United States, fifteen governors of Virginia, four signers of the Declaration of Independence, and five judges of the Supreme Court.

Not until 1888 did the College of William and Mary become in any sense a State institution. At that time the State granted an appropriation on condition that the college would train teachers for the public schools of the State. In 1906, the college became strictly a State institution governed by a board appointed by the Governor of Virginia. In 1918, women were admitted to the college.

The College of William and Mary has now attained to an enrollment in the regular session of approximately 1,100, with nearly 800 attending the summer session and 900 enrolled in the extension division. In addition, approximately 80 students are enrolled in the Richmond School for Social Work, 400 in Current Events courses in Richmond, and 170 in the Political Science courses in Norfolk. Approximately 84 per cent of the students in the regular session live in Virginia.

The faculty at William and Mary consists of 52 professors of the various ranks and 18 instructors. Curricula are offered leading to the degrees of Bachelor of Arts, Bachelor of Science, and Master of Arts.

The Virginia Military Institute

In 1839, in order that the arsenal established at Lexington might be most adequately protected, and in order that the young men might be given an education while protecting it, the Virginia Military Institute was estab-

lished, and the first corps of cadets, 32 young men, was mustered into the service of the State. In 1842, the military institute was given by legislative act the distinctive mission of preparing teachers for the public schools of the State. In 1860, the institute was expanded into a general scientific school, including agriculture, engineering and fine arts. Following the War between the States, in which the cadets and ex-cadets played a most distinguished part, the institute assumed the role of a college of arts, sciences, and engineering, which it still maintains. Throughout its long history, it has consistently retained its military character, and a most impressive list of military heroes owe their training to this institute.

The Virginia Military Institute had in 1926-27 724 students, of whom 305 were residents of Virginia and 419 students who were residents of other States and foreign countries. The staff consists of 33 professors of the various ranks and 15 instructors, in addition to the 9 officers of the United States Army who are stationed at the institute to offer instruction in the various branches of the military service.

The Medical College of Virginia

The present Medical College of Virginia was formed by the consolidation in 1913 of the University College of Medicine and the Medical College of Virginia, both located in Richmond. The Medical College of Virginia dates back to 1838, and it played a leading part in the development of medicine throughout the latter half of the nineteenth century. The University College of Medicine dates back to 1893, and it early attained distinction among schools of medicine. By the combination of these two institutions rich traditions combined with large equipment in the making of a standard college, including courses in medicine, dentistry, pharmacy, and nursing.

The Medical College of Virginia had during 1926-27 an enrollment of 369 in the Department of Medicine, 89 in the Department of Dentistry, 100 in the Department of Pharmacy, and 70 in the Department of Nursing. Of the enrollments in the several departments, the following were residents of Virginia: 222 in Medicine, 65 in Dentistry, 82 in Pharmacy, and 44 in Nursing. The instructional staff consisted of 56 professors of the various ranks, 82 associates and instructors, and 10 assistants. A large proportion of this staff gave only part time to the work in the college.

Non-State Institutions

No account of the higher education of the State of Virginia would be complete without a recognition of the service rendered by institutions on private foundations. In the last report of the State Superintendent of Public Instruction, 121 such institutions are named. These, of course, vary in type from quite elementary schools to colleges with high standards and cherished traditions. While many of these are deserving of mention, space will permit the mention of only Washington and Lee University, at Lexington. This is the institution which George Washington saw fit to endow, and which was presided over by Robert E. Lee, who was but little less distinguished for his educational statesmanship than for his military prowess.

CHAPTER XXX

STUDENTS IN HIGHER INSTITUTIONS

Where They Come from and Where They Go After Graduation

There is no way to determine precisely how many young people of any State ought to attend college. The State supports both its public school system and its higher institutions on the assumption that the welfare of the State is enhanced by having her people trained in intelligence and broadened in human sympathies as well as prepared to perform effectively the services demanded by the various vocations and professions.

It may be of interest to inquire how the number of Virginia young people attending college compares with the number attending college in other States in proportion to the total population. Fortunately, a recent bulletin of the United States Bureau of Education, entitled "Residence and Migration of University and College Students," gives us much valuable information on this point. The data are for the year 1922-23, and the study was made by Dr. George F. Zook, at the time chief of the Division of Higher Education in the United States Bureau of Education. From this report we learn that 7,758 Virginia young people were in attendance at some college, either in Virginia or outside. Of these, 5,525 were men, and 2,233 were women. The ratio of this total number of students to the total population was 1 to 309. In typical surrounding States the corresponding ratios were as follows:

North Carolina	1 to 261	South Carolina	1 to 275
Florida	1 to 313	Maryland	1 to 275
Delaware	1 to 272	Pennsylvania ..	1 to 235
	New York	1 to 205	

It appears, therefore, that among seaboard States Virginia does not stand out as educating an unduly large proportion of her young people. Although the comparison is not so valid, it may be interesting to note what this ratio was for a number of Middle Western States:

Minnesota	1 to 159	Arkansas	1 to 445
Missouri	1 to 193	Texas	1 to 195
Louisiana	1 to 343	Oregon	1 to 121
Washington ...	1 to 129	California	1 to 146
	Iowa	1 to 127	

It should be understood that where there is a considerable population of negroes or other races who are not yet availing themselves of higher education, the figures above given should be modified accordingly. Even with this fact taken into account, however, Virginia is not educating in higher institutions a larger proportion of her young people than are other States.

While Virginia ranks thirty-seventh among the forty-eight States in the proportion of her population attending colleges and universities, she ranks thirty-first in the proportion of her people attending liberal arts colleges; fortieth in the proportion of her people studying engineering; fortieth in the proportion studying agriculture; forty-third in the proportion studying commerce and business administration; seventeenth in the proportion studying medicine; thirty-sixth in the proportion studying dentistry; twenty-sixth in the proportion studying law; twenty-ninth in the proportion studying theology, and thirty-eighth in the proportion studying graduate work in arts and science.

From this table it appears that in Virginia stress has been laid upon liberal arts, law and medicine, while relatively less stress has been placed upon the

study of engineering, agriculture, and commerce and business administration. She ranks low, also, in attention to graduate study in spite of her rich traditions in the field of scholarship.

Although there were in 1922-23 only 7,758 Virginia young people studying in colleges and universities in and outside of Virginia, there were during the same year 9,592 students enrolled in the colleges and universities of Virginia. This indicates that the institutions in Virginia made strong appeal to students residing in other States. In spite of this fact, 29.9 per cent of Virginia young people were attending institutions outside the State, while 4,068 non-residents were attending Virginia colleges. This indicates that the needs of the young people of Virginia have not been the determining factor in the development of the colleges in the State. If Virginia desires to maintain institutions making a national appeal, such a desire should not, however, be gratified at the expense of satisfying the needs of students residing in the State.

The above discussion deals with the situation in the State including all colleges, whether State-controlled or not. Inquiry must now be made as to the relation of non-resident to resident students in the State-controlled institutions. In the most recent bulletins the following figures are given for the regular attendance:

September to June:	Residents.	Non-residents.	Per Cent Resident.
University	1,129	978	54
Virginia Polytechnic Institute	1,097	127	90
William and Mary	901	176	84
Virginia Military Institute	305	419	42
Medical College of Virginia	413	215	66
Total	3,845	1,915	67

It will be noted from these figures that while the average for all Virginia colleges indicates that 58 per cent of the student population came from within the State, the percentage of Virginia residents in the State-controlled institutions is 67. The University and the Military Institute have more than the average of non-resident students, while the other three institutions have less than the average.

One other set of facts bears upon the adaptation of these institutions to the needs of the State. Where do the graduates go for their life's service following training in these State institutions?

Tables 33, 34 and 35 show what proportion of the graduates of the University of Virginia, Virginia Polytechnic Institute, and Virginia Military Institute in the classes of 1923, 1924, 1925, 1926 and 1927 are employed in Virginia. Data have not been secured for the College of William and Mary and the Medical College of Virginia; but the president of the former institution has informed the survey staff that a very large majority of the graduates are located in Virginia.

It should be noted that the different graduates of V. M. I. for the past five years are engaged in thirty-six different occupations; and the range of employment is even greater for the graduates of V. P. I. Data regarding present occupations of the graduates of the other higher institutions are not available.

CHAPTER XXXI

FINANCIAL SUPPORT OF HIGHER EDUCATION

There can be no categorical answer given to the question: "How much ought a State to contribute to higher education?" In the final analysis the question is one of the extent of faith which the people have in State-supported higher education as an agency in advancing the welfare of the State. However, certain facts may be set forth as an aid in arriving at an answer.

The total amounts which Virginia has contributed to each of the higher institutions during the past fourteen-year period, from 1915 to 1928, inclusive, are given below:

	For Additions and Improvements.	For Other Purposes.
University of Virginia	\$498,802	\$2,945,073
Virginia Polytechnic Institute	495,790	*2,421,349
William and Mary	626,141	1,517,231
Virginia Military Institute	329,800	1,214,820
Farmville Teachers College	221,900	1,228,589
Fredericksburg Teachers College	158,435	768,746
Harrisonburg Teachers College	272,300	853,713
Radford Teachers College	241,250	782,737
Medical College of Virginia		910,500
Total	<u>\$3,155,517</u>	<u>\$12,270,528</u>
Agricultural Extension Division (all purposes)		1,725,083
Agricultural Experiment Station		539,650
Grand total.....		\$18,601,278

This is an average of \$1,328,000 per year for all institutions, including teachers colleges. That is a very considerable sum. Whether it is too much or too little depends upon the value put upon higher education in comparison with the value put upon other things.

With no intention of passing judgment upon whether this sum is too large or too small, but merely as an indication of some of the other expenditures in the State, the survey staff call attention to the following facts:

The value of tangible wealth in Virginia in 1923 as estimated by the Federal Census was	\$4,891,570,000
The amount in savings accounts in Virginia as com- piled by American Bankers Assn. in 1924 was	208,329,000
The amount paid for life insurance premiums in Vir- ginia in 1924, as given in the Life Insurance Year- book, was	25511,684
The volume of building construction for which con- tracts were awarded in Virginia in 1924 as given in the 1924 Commerce Yearbook of the United States Department of Commerce was	79,780,605
The amount collected in taxes, Federal, State and local, in Virginia in 1924, as reported by the National Industrial Conference Board, was	97,785,000
The approximate amount spent in Virginia in 1924 for soft drinks, ice cream, theaters, candy, chewing gum, tobacco, jewelry, perfumes and cosmetics (as based upon the amount estimated by the United States Treasury Department to have been spent in the United States), was	66,264,000

(Note: While the original sources are cited for each of the six amounts given above, the figures are quoted from No. 1, Vol. V, of the Research Bulletin of the National Education Association.)

*Excluding Experiment Station and Extension Division.

Cost of Higher Education in Virginia as Compared with Other States

The total value of tangible wealth in the United States in 1922 was \$34,718,830,000, as reported in the Federal Bureau of the Census. The value of the tangible wealth of Virginia was \$4,891,570,000, or 1.55 per cent of the whole National wealth. The total contribution for higher education by States and cities, according to the United States Bureau of Education report, in the United States in 1923-24, was \$87,726,414. The contribution to higher education was \$1,379,927, or 1.57 per cent of the total. Virginia has 1.55 per cent of tangible wealth of the United States and contributed 1.57 per cent of all money contributed by States and cities to higher education.

The total white population of the United States in 1920 was 94,820,915, and the total white population of Virginia was 1,617,907. The total contribution by all States to higher education per white person in total population was ninety-two cents. The contribution of Virginia per white person was eighty-five cents. If the Negro population be included in the calculation, the difference between the per capita contribution for Virginia and for the whole country will, of course, be considerably increased.

The total students enrolled in publicly controlled universities, colleges, and professional schools in 1923-24, according to the report of the United States Bureau of Education, was 166,860 men and 88,770 women,—a total of 255,630. The numbers enrolled in the State-supported institutions of Virginia was 4,453 men and 523 women,—a total of 4,986, or 1.91 per cent of the enrollment of the entire United States. Virginia's white population equals 1.71 per cent of the total white population of the United States.

The contribution of the States taken as a whole amounted to \$343 per student enrolled. The contribution of Virginia was \$277 per student enrolled, using figures presented in the United States Bureau report.

All publicly controlled universities, colleges, and professional schools in the United States received from the three main sources of revenue in 1923-24 the following amounts:

From student fees for tuition and other educational services	\$16,277,864
From productive funds	3,713,648
From State or city for current expenses	69,598,345
Total	\$89,589,857

All the publicly controlled universities, colleges, and professional schools in Virginia received in 1923-24 from the same sources the following amounts:

From student fees	\$ 581,813
From productive funds	196,144
From the State for current expenses	1,135,474
Total	\$1,913,431

From these figures it will be noted that the contribution of the States to the institutions throughout the country was 77 per cent of the total from the three main sources, while in Virginia it was 59 per cent.

With the above facts as a basis, it should be possible for the State to arrive at a satisfactory answer to the question of how much the State should contribute to higher education. Of course, this has nothing to do with the question of whether each dollar contributed is buying one dollar's worth of the kind of education the State desires. Efficiency should be demanded just the same whether the contributions by the State are large or are small. This question is discussed in another section of this report.

Unit Costs at the Higher Institutions

One aspect of the question of efficiency, however, can best be discussed here, namely, unit costs of instruction. How much does each institution spend for a defined unit of work?

In Table 36 is given the number of student credit hours taught, salary costs, and salary cost per student year credit hour in each department in the several institutions. Credits are figured in the University and the Virginia Polytechnic Institute in terms of student quarter credit hours, because these institutions are organized on the quarterly basis. They are figured in terms of semester hours at William and Mary and Virginia Military Institute because these institutions are organized on the semester basis. The student credit hour means the work of one student carried through the semester or quarter in a course meeting once each week. A three-credit course therefore is a course meeting three times a week throughout the term, and if there are twenty students registered in it, the course will count for sixty student credit hours.

The salary cost per student credit hour was first calculated and then in the case of the University and the Polytechnic Institute, that figure was multiplied by three, and in the case of William and Mary and Virginia Military Institution, it was multiplied by two, in order that the salary cost figure might be comparable, one institution with another. Salary cost per student year credit hour, therefore, means the salary cost of instruction for one student throughout the academic year for one hour per week. The salary cost per student may be fairly calculated by multiplying this figure by the typical number of hours which a student pursues per week.

Colleges of Medicine and Law at the University and the entire Virginia Medical College are omitted because their work cannot be fairly calculated in terms of student credit hours.

There is always considerable risk in presenting such data as these because of the possibility of erroneous interpretation. Some of the more obvious types of erroneous interpretations may be cited as, for example:

1. In Astronomy, in the University of Virginia, the salary cost seems to be exorbitant. When one bears in mind that the excellent observatory maintained by the university has many other uses than the instruction of students in credit courses, one can understand that such cost may be entirely justified.

2. Certain variations in costs among the departments may be due to the mere accident that in one department the faculty may be made up largely of professors, while in another department it may be made up largely of instructors. This condition may well be reversed in ten years without any change of policy in the university.

3. The salary cost figure in some departments may not represent the cost of instruction alone. For example, an administrative officer of the institution may be associated with a given department and have his salary listed with that department, even though he offers but little instruction.

Therefore, fine distinctions in departmental costs cannot be made. The purpose of the table is rather to show large tendencies and its figures should be interpreted accordingly.

The main significance of the table may be stated as follows:

1. The scope of work in each institution is well brought out in these tables. At the university a wide range of cultural courses is offered while at V. P. I. a minimum of these courses is offered. Questions might be raised concerning foreign languages and home economics at V. P. I. in the light of the fact that the College of William and Mary is now offering more than three times as much work in home economics

as is V. P. I. The College of William and Mary is offering a general cultural curriculum. The Virginia Military Institute, though offering civil engineering and electrical engineering, is yet essentially a liberal arts college, stressing particularly mathematics, English, history, foreign languages and natural sciences. Practically as much French and Spanish is taught in the Virginia Military Institute as is taught at all of the other three institutions combined.

2. Costs per student year credit hour are greater in the academic departments of the University than in corresponding departments in the other three institutions. This is due primarily to the fact that the university carries its work into more advanced and graduate instruction where numbers of students are relatively small and costs per student credit relatively high. The relatively low cost of the Virginia Military Institute reflects the economy which always accompanies a fixed curriculum in distinction from an elective curriculum, such as predominates at the College of William and Mary. The outstanding fact, however, is the relatively low cost at all of the institutions. While the salary cost per student year, obtained by multiplying the salary cost per student year credit hour by fifteen, which is the typical registration of each student in terms of credit hours, is a little over \$200 at the university, and less than \$200 in each of the other institutions. The salary cost in the higher institutions, taken as a whole, is, in general, between 50 and 60 per cent of the total cost. On this basis, the total student year cost is less than \$400 at the university, while at the Virginia Military Institute it is less than \$250. When these figures are compared with the actual tuition charge at many of the leading private institutions, which range from \$250 to \$500, it must be apparent that there is no extravagance in the higher institutions of Virginia.

CHAPTER XXXII

HIGHER EDUCATION OF WOMEN

There is a radical difference in the opinions held in various sections of the country on the question of coeducation. Traditionally, the Southern States have followed the policy of separate colleges for men and women. In the Central West and the Far West the tradition favors almost exclusively coeducation.

There is no proof of the superiority of one form over the other. To those who have grown up with coeducation, the rather intense feeling of those who insist on separate schools seems quite without foundation. To those who have grown up under the training of separate schools, the advocacy of coeducation is beyond understanding. The question is yet largely in the realm of feeling.

One thing is quite clear, Virginia has adopted the policy of supporting education of certain numbers of her young people at segregated and at coeducational institutions. With the growing recognition of the principle of equal rights for men and for women, Virginia must provide as adequate educational facilities for her women as she provides for her men. Whatever justification the State finds for subsidizing the education of men will apply equally well to the education of women. Not only do women vote, a responsibility which calls for highly-trained intelligence, but women are property holders; women occupy positions in the various vocations and professions; in short, the State can no better afford to have poorly-educated women than it can afford to have poorly-educated men.

At present, the State provides opportunities, with certain limitations, for the education of women in the professional schools and the Graduate School at the university, in the several departments of the Medical College of Virginia, in the College of William and Mary, and at the Virginia Polytechnic Institute.

At the university, women students must have reached the age of twenty years, and must have satisfied the admission requirements to the professional schools by attendance at a liberal arts college elsewhere.

At the College of William and Mary, where women were first admitted in 1918, the number of women is limited by regulation of the Board of Visitors to less than 50 per cent of the student body. Since William and Mary is making plans for an ultimate maximum enrollment of 1,200, something less than 600 women at most can be admitted at any time to the College of William and Mary.

At the Virginia Polytechnic Institute, where women were first admitted in 1921, the express policy of the administration is not to modify the offerings of the institution so as to serve the educational needs of women, but instead the institution expects to adhere rigidly to its program of curricula for training in agriculture, engineering, and business administration. All of these courses are distinctly vocational and only in very limited degree may women expect to find them serviceable.

Provision for Women at the Teacher Colleges

Virginia has four teacher colleges, and all of them limit their attendance to women. It should be noted, however, that the functions of these teacher colleges are strictly confined to the preparation of teachers. At present, therefore, the only place where a liberal education is available for women is at the College of William and Mary, where a very limited number may enroll. The demand for admission to William and Mary already far exceeds the opportunities. Certain excellent privately-operated colleges for women, such as Randolph-Macon, Sweet Briar, and Hollins are rendering service in supplementing the State's provisions for the education of women. However, it does

not seem wise State policy nor fair to the women of the State not to provide under State support better facilities than are at present provided for the liberal education of women.

Among the several alternatives, three may be proposed for consideration:

a. Extending the principle of coeducation which now operates at the College of William and Mary to include the College of Arts and Sciences at the university.

b. But assuming that the policy of restricting the College of Arts and Sciences at the university to men is to be continued, which the survey staff recommend, then one of the State teacher colleges should be enlarged in its purposes and converted into a Virginia College for Women. It could be independent in its control, with its separate board, or it could be a part of the State university organization. The essential consideration in either case is that it should be a high-class liberal arts college as complete in its offerings for women as is the College of Arts and Sciences at the university for men. It should train teachers for high-school positions at least. Practically all first-class colleges for women train teachers. Many of them train kindergarten and primary teachers, as well as high-school teachers; therefore, converting one State teacher college into a liberal arts college for women would not in any way lessen the service of the institution as a training school for teachers; it would merely add additional service in the form of a liberal arts education.

c. The limitation which is imposed upon the attendance of women at the College of William and Mary should be removed. Men students, if unable to gain admittance to William and Mary, may go to the university for their undergraduate work while women may not. It should be recognized that this alternative might lead to the development of a college which would be predominately for women at William and Mary. But if the State prefers to have a distinctly men's college at the university, then a distinctly women's college of high class, coordinate in every respect with the College of Arts and Sciences at the university and adapted to the education of women, is a development almost certain to come.

CHAPTER XXXIII

COORDINATING THE WORK OF THE HIGHER INSTITUTIONS

From the illustrations cited above in engineering, law, medicine, and graduate instruction of women, it will be apparent that there is urgent need of careful and continuous study to coordinate the work of all the institutions into a single unified system of higher education. Even though the survey staff do not undertake to pass final judgment upon just what this unified system would involve in the way of limiting or expanding the functions of any one of the institutions, they still recognize that the confidence of the people of the State cannot be maintained in these institutions without some agency which will guarantee the continuous study of the problem and the adjustment of the work of each institution so as to meet the needs of the State rather than to satisfy the natural institutional tendency toward unlimited expansion. Careful thought has been given, therefore, by the survey staff to what seems to be the best scheme of coordination, in order that the State may have assurance at all times that the policies of the several institutions have had thorough examination from the standpoint of State interest.

(a) Present Coordination Through Governor, Budget Director and General Assembly

The recent reorganization of State government, of which Virginia is rightly proud, concentrates in the hands of the Governor and his fiscal advisers extensive authority to pass upon the requests of the several institutions for appropriations before these requests are acted on by the General Assembly. As was to be expected, the General Assembly does in most cases accept the Governor's judgment as to the proper amount to appropriate to each of the institutions; therefore, the Governor is the coordinating official and undertakes to acquaint himself with the needs of the several institutions while making up his budget recommendations to the General Assembly.

As the burdens of the office of Governor increase, it is necessary that the Governor should rely more and more upon the advice of his financial assistants in matters concerning budget recommendations to the General Assembly. If the survey staff may judge from all the comments that have been heard, Virginia has so far been exceedingly fortunate in having governors and budget directors who maintain a keen personal interest in the educational institutions. Nothing but the kindest expressions have been heard, and therefore what is here set down can in no sense be regarded as criticism of the part the Governor or the Director of the Budget has played in the financial problems of the institutions. It seems necessary to point out, however, that the inevitable tendency of the present plan of centralized State government is to place a larger and larger responsibility for the final determination of the recommendations as to what the educational institutions are to receive from the State in the hands of the Director of the Budget.

In considering this matter, there is encountered the same principle that has operated in connection with public schools in cities all over the country. Shall expenditures for education in a city be passed upon by the board of education on recommendation of the business manager of the schools? In other words, shall the city superintendent of schools and the business manager for the schools be coordinate officials making recommendations independently to the board of education,—the one on educational matters and the other on fiscal matters? Or shall the business manager be a part of the school organization under the general jurisdiction of the city superintendent of schools? After long and devious struggles with this problem, cities have in most all cases come to the conclusion that the city superintendent of schools

must be at the head of the financial management as well as the educational work of the schools, and that the business manager must report to the board of education through the superintendent rather than independent of him.

In the plan which is developing in the State government of Virginia, the reverse of this principle seems to be coming into operation. In general legislative functions, the General Assembly is comparable with the board of education of city school systems. The reports of educational officials in charge of State institutions are coming to be made through the business manager; that is to say, through the Director of the Budget, and his word is, to a large extent, the final word on the subject of State support for these institutions. The task of coordinating the work of the several institutions is therefore in the hands, not of an educational officer, but of a financial officer.

(b) Method of Coordination Recommended in Virginia

Consistent with the present tendency to centralize responsibility for the State government, it seems that there should be in the councils of the State a highly trained expert in the field of higher education, whose counsel should be sought by both the Governor and the Director of the Budget, and who should represent the cause of higher education throughout the State. To accomplish this end the following plan is proposed:

First, that the office of Chancellor for Higher Education in Virginia be created, the chancellor to be an outstanding leader in the field of higher education.

Second, in order to assure a high standard in selecting a chancellor, his salary should be at least as much as the highest paid president of any State educational institution of Virginia.

Third, that the chancellor be chosen by the State Board of Education on nomination of a special committee composed as follows: The Governor of the State; the State Superintendent of Public Instruction, who shall act as chairman; one member appointed by the Board of Visitors of the University of Virginia; one by the Board of Visitors of the Polytechnic Institute; one by the Board of Visitors of the College of William and Mary; one by the Board of Visitors of the Virginia Military Institute (if continued); one by the Board of Visitors of the Medical College of Virginia; one by the Board of Visitors of the State Teacher Colleges, and one by the Board of Visitors of the Virginia Normal and Industrial School.

Fourth, the budget of the office of the chancellor should be approved by the State Board of Education, and the funds to meet this budget should be contributed by the several institutions of higher education in the proportion that the State appropriations to each institution bear to the total appropriations made by the State for the maintenance and operation of these institutions.

Fifth, that an office be provided for the chancellor in the State office building.

Sixth, that the duties of the chancellor be defined as follows:

1. To study the needs of higher education in Virginia, and by conference and counsel with the several institutions to secure adjustments within those institutions so as to avoid duplication, and to provide adequately for the educational needs of the State;

2. To represent the cause of higher education in the councils of the State and before the people at large, in order that the place and function of higher education in developing the State's human and material resources may be the better comprehended;

3. To examine the budgets submitted to the Governor by the several institutions of higher education, and to indicate his recommendations with reference to each item for the consideration of the Governor and the Director of the Budget, thus assuring the devel-

opment of each institution in conformity with a single unified system of higher education in the State.

Plans of Coordination in Effect in Other States

By way of justifying the above recommendations, the following brief discussion is offered concerning types of coordinating agencies at present in operation throughout the States, with a brief criticism of each type:

a. One of the most favored schemes of bringing about coordination of the institutions within a State has been to abolish the separate boards of control, and to substitute a single board of control in all the institutions. This has been done in Iowa and Kansas. Where this plan has been adopted it has been discovered that the single board of control, composed, as it always is, of men and women who are laymen in the field of education, unacquainted with the details of educational organization, have found it impossible to determine what is wise in the way of curtailing the activities of any institution. The president of any one of the institutions under control of the board has found it possible to convince the board of the desirability of most of the expansion which he desires to make. This plan has therefore not been found effective in accomplishing what a State most desires to have accomplished.

b. Another plan illustrated by the State of Montana is to have a single board, with an educational executive who is the virtual head of the system of higher education, vested with large authority in determining policies for the development of the several institutions. This scheme has the merit of efficiency if viewed alone from the standpoint of financial expenditures, but it is doubtful whether the institutions operating under it can feel the necessary freedom from external control and can be expected to develop their individual characteristics as adequately as where each institution retains a large measure of independence, and at the same time is safeguarded against unwise expansion and the duplication of work done at all other institutions. It would seem that this plan would be particularly objectionable in Virginia because each institution has a cherished history and a rich body of traditions which it is to the advantage of the State to have maintained.

c. Coordination of the higher institutions is in some States, such as New York, achieved through a specialist in higher education, appointed on the staff of the State Commissioner of Education. Where extensive authority resides in the State Commissioner of Education in the exercise of control over all phases of the public school system, this seems to be a logical organization. Where, however, it is desired to retain a large measure of local initiative and independence in each unit of the educational system, such a scheme is very unwelcome. It is particularly unwelcome to the higher institutions in which there are at work large numbers of specialists who are energetic and whose services can scarcely be properly understood by a deputy in the office of a State Commissioner of Education.

d. A scheme has lately been incorporated in several States which may be illustrated by the Board of High Curricula in the State of Oregon. Here governing boards are retained in each institution but an additional board of laymen is appointed whose only responsibility is to pass upon the question of what courses are appropriate to offer in each institution. Some service is undoubtedly rendered by such a board, but as was indicated in connection with the plan of having a single board of control in charge of several institutions, the Board of Higher Curricula, without having professional leadership, finds it difficult if not impossible to determine what is the wise limitation to place upon the functions of each institution under their jurisdiction.

From the foregoing discussion it will be clear that none of the plans now in operation in the different States is entirely satisfactory as an agency for coordinating the activities of the institutions of higher learning. It is the belief of the survey staff that the recommendation for a Virginia plan made above combines the strong points of the others and avoids their weak points. It provides for a high class educational leader who will serve as a coordinating agent, and yet leaves the internal control of the institutions in the hands of their own faculties, presidents, and boards. Separate boards for each institution are very serviceable in maintaining continuity of policy, public confidence, and good will. Such boards furnish needed counsel for the presidents of the institutions and serve as a check on hasty action.

To supplant all the boards with one common board would require either that the members of the one board give so great an amount of time that busy men could not afford to accept appointment to a place on it; or else that the board would have to be a salaried board, thus bringing the appointments into the category of political plums. In neither circumstance would the best interests of the State be served. A paid board of laymen has proved to be worse than merely ineffective where the plan has been tried. What is required for coordinating the work of the several institutions is an educational expert who is employed for this special purpose.

Furthermore, in the scheme of centralized State government where one of the most important and most costly activities is higher education, the Governor must feel the need of an advisor who can be depended upon to view the development of higher education from the viewpoint of the State's interest rather than from that of the separate institutions.

Finally, the institutions themselves must not be endangered by any plan which would put them at the mercy of any agency of coordination except a great educational leader. They have nothing to fear if their budgets are passed upon by a trained educator who can intelligently study the State's needs and each institution's ambitions, and can bring broad educational experience to bear on the problems which both the State and the institutions confront.

CHAPTER XXXIV

THE NUMBER OF STUDENTS TO BE EDUCATED AT STATE EXPENSE

In Division IX, of this report, data are given in detail showing the ability of Virginia to support higher education. It will be concluded from those facts, no doubt, that in comparison with the amount spent for other things the sum spent for higher education is, to say the least, not excessive. The question is not one of finance, primarily, but one of State policy. Is it a wise policy to provide at State expense higher education for all young people who complete the work of the high school and apply for admission to the colleges?

The pros and cons of this question of policy have been urged so widely of late that it seems unnecessary to state them in this report. On one thing all agree. The determination of what policy shall be pursued is a matter for the State to decide, and not for the educational institutions. While the great majority of States which support State universities have adopted the policy of higher education for all qualified young people at State expense, Virginia has followed the plan of charging students fees for their tuition, and of assigning a given number of State scholarships to each institution, the assumption being that such scholarships represented the numbers which it was felt wise to educate at State expense.

The State Policy in Virginia

Without undertaking to pass judgment upon the wisdom of this policy of limiting numbers of students who are given free tuition, the survey staff desires to point out the logical relation between this policy and the question of what the State should appropriate for the annual maintenance and operation of each institution. The Code of Virginia, 1919, sections 854 and 758, reads as follows, with reference to the Virginia Polytechnic Institute:

“A number of students equal to four times the number of members of the House of Delegates, to be apportioned in the same manner, shall have the privilege of attending said college without charge for tuition, use of laboratories or public buildings, to be selected by the school trustees of the respective counties, cities, and election districts for said delegates, with reference to the highest proficiency and good character, from the white male students of the free schools of their respective counties, cities, and election districts, or, in their discretion, from other than those attending said free schools. The said students, privileged to attend the college without charge for tuition, use of laboratories or public buildings, shall continue to be selected for the period of two years; provided, that on the recommendation of the faculty of the said college for more than ordinary diligence and proficiency, any student so selected may be continued by the said Board of Visitors for a longer period.”

The State's obligation to appropriate to the Virginia Polytechnic Institute a sum adequate to pay the full cost of instructing these State scholars is quite clear. What that cost figure is can no doubt be most wisely left to the Board of Visitors appointed by the Governor of the State to manage the affairs of the Polytechnic Institute. When the cost per student is determined, then the amount of appropriation which the State should make is arrived at by multiplying the number of State scholarships by the annual cost per student. Of course, support for all non-instruction activities, such as research, experiment station, and extension, will be in addition.

Two assumptions must be accepted in conjunction with this policy: First, the State may wish to establish additional scholarships covering either whole or partial tuition cost, and this will modify the amount to be granted by the State; second, the institution will be under obligation to charge all non-scholarship students, whether they come from within or from outside the State, an amount for tuition equal to the figure submitted by the Board of Visitors as the full cost per student.

Requiring all Non-State Students to Bear the Actual Cost of Instruction

If such procedure were adopted, then the responsibility would be placed where it belongs. The State would decide how many should be educated at State expense, and the boards in control of the several institutions would determine the legitimate cost per student at each institution. Each institution would presumably work out the best means of selecting those students who could serve the State best through being educated at State expense. Such selection would not be made on the basis of financial need of the student primarily, but on the capacity of the student to serve the State after attendance at college. The State rather than the institution would bear the responsibility of excluding from free tuition those young people who were not awarded scholarships. Thus, the demand from time to time for additional State scholarships would be considered by the General Assembly rather than by the educational institutions, and the question of appropriations for the educational institutions would revolve more around the question of the numbers which the State desired to educate and less around detailed items of the institutions' budgets.

It may be contended that the several boards of visitors will not use due caution in submitting a figure for the cost per student. In this connection, let it be remembered that these boards of visitors are State servants, appointed by the Governor, and presumably as much interested in economical administration as are other citizens. There is also a check on any tendency to liberality in the fact that the figure submitted as the cost per student is the amount which must also be charged non-scholarship students for tuition. Any excessive sum will militate against the enrollment of such students and will thus reduce the total revenue. Furthermore, the examination of the budgets of the several institutions by the Governor, the chancellor, the Director of the Budget and the General Assembly will serve to check too great liberality.

The State Should Supply Necessary Buildings and Equipment

The above discussion of a practicable method of determining the amount which the State should grant for annual maintenance and operation has nothing to do with the question of buildings. If the State assumes responsibility for ownership of an institution, and for designating certain State scholarships for that institution, it is the State's plain duty to provide suitable buildings in which the work can be carried on. While dormitories and other income-producing buildings may properly be built with loans to be repaid from income, regular education buildings are a direct charge against the State, exactly as are elementary school buildings in the cities a charge against the cities. The survey staff believe that the pride of the citizens of Virginia would be sorely wounded if the people realized the inadequacy of the buildings provided for regular class use at some of the institutions owned by the State. Virginia people spend for tobacco during a single lenten season more than two and a half million dollars, but they have not appropriated that much all told for educational buildings at their higher educational institutions during the last ten years.

One other matter must be discussed in its relation to the question of determining the appropriate amount for the State to grant to the several State institutions. At the university, and to a lesser degree at William and Mary,

gifts for endowment have been received at various times and for various purposes. In general, the donors have made their bequests to enable the institution to perform a service over and above what the State seemed able to support. Rarely has a donor given to a State-supported institution with the expectation that the State would be thus relieved of certain support which it ought to give. In other words, rarely has a donor left his money to a State.

Donors do realize, however, that a State institution is one of the most stable of social agencies today and is a most fitting recipient of gifts for functions, which it seems scarcely to be expected that the State will or can support. Such gifts are expected to increase the scope of the institution beyond what it would be otherwise, rather than to assist the State in carrying on what the State would be carrying on anyway if there had been no gift.

Thus, the budget of a college as a State-supported institution should cover all those functions which the State regards as appropriate to provide for at State expense. A supplementary budget should cover those activities supported by the income from endowments. This does not imply that full information concerning the expenditures under this supplementary budget should not be available at all times to the proper State officials. The supplementary budget for two purposes is advised: First, the State should have knowledge of the scope of the work which is supported at State expense. Presumably a sovereign State does not wish to be under obligation to private benefactors for the support of such functions as the State regards as within its own province to support. Second, unless some such separation of the endowment income from the regular income prevails, it is practically certain that prospective donors will not make State institutions the recipients of their gifts. With the tendency on the part of men and women of wealth to bestow their gifts upon educational institutions, it would be most regrettable to have a budgeting policy in Virginia such as would virtually close the doors of her higher institutions of learning to this source of supplemental income.

To date there has been a recognition of this principle of separation of endowment income from other income in Virginia, and the survey staff desire to commend this policy.

CHAPTER XXXV

DUPLICATION OF WORK IN THE HIGHER INSTITUTIONS

Each of the higher institutions had an independent origin and has had a distinctive individual history. Each has developed largely according to the ideals and ambitions of the leaders in charge. Of course, it has been assumed in the case of all of these leaders that the institutions were rendering effective service to the State. There has not been, however, at any time any strong forces tending to coordinate the activities of all of the institutions into a common system of higher education for the State.

Present Effort to Coordinate the Work of the Several Institutions

Of late years, there has been a marked tendency on the part of the heads of the several higher institutions to confer about their common problems and to determine their lines of development in part according to a cooperative plan. The teacher colleges, which had for a number of years each its own separate board of control, are all now operating under a single board. The reorganization plan of State government places the responsibility upon the Governor and his budget advisers of exercising certain coordinating influences in recommending appropriations to the General Assembly. Likewise, it is understood that since all of the institutions receive grants from the General Assembly, there is in a general way a tendency towards coordination exerted by the Assembly. In spite of these coordinating forces, however, each institution tends still to view its development as an independent entity, with relatively little influence exerted upon it by what is being done at the other higher institutions of the State.

Economical v. Expensive Duplication

There exists in some quarters an erroneous notion as to the significance of duplication. The fact that certain courses may be taught at two or more of the institutions does not signify that the State is following a wasteful policy with reference thereto. For example, if one hundred students at the College of William and Mary elect a certain course in mathematics, history, English, or chemistry, and another one hundred students at the University of Virginia elect a similar course in mathematics, history, English, or chemistry, it would be neither wise nor economical to insist that the two hundred students should be combined in one institution, and that the course in question should be eliminated from the other institution. Just as high schools teach the same subjects in Staunton, Roanoke, Norfolk, and scores of other cities in the State, so the more elementary collegiate subjects should be given in as many institutions as the numbers of students electing them justify. It is no more expensive to teach them in several places than to teach them in one place, so long as the numbers in each place are large enough to provide for adequate size of classes and maximum use of faculty and equipment. Wherever the instruction of students in a given course requires highly-specialized equipment, such as a laboratory for mechanical engineering with its expensive machinery, or a law library with its expensive books, or wherever instruction calls for specially-trained and highly-paid teachers, then, unless the numbers electing such courses are large enough to use these expensive facilities to the limit, the State should not continue to support the expensive but little-demanded type of instruction. The important criterion is whether the cost per student is essentially larger, if the work is divided than if the work is united. Expensive duplication is usually found to exist in professional curricula, if at all. The State's quota of lawyers can be

determined reasonably accurately. When so determined, it will appear that the annual output of lawyers necessary to fill the ranks can be more economically trained at one center than at two. The same thing is true with reference to the necessary annual output of physicians and surgeons, dentists, pharmacists and the like. The survey staff do not feel that its acquaintance with the State is adequate to enable it to judge of these questions in detail, but the essential facts can be assembled readily and the questions answered on the basis of the principle above stated.

The inspection of the several institutions which members of the survey staff have been able to make, reveals the following instances of apparent expensive duplication which call for careful investigation:

1. Engineering

Engineering work is maintained at three of the State institutions, viz., the University, the Military Institute and the Polytechnic Institute. It must not be concluded, however, that the work in these three institutions is the same. The purpose of engineering education at the military institute is to offer to the young men who have taken the first two years of cultural work an opportunity to make their major study during the last two years in civil or electrical engineering. The military institute has not undertaken to develop complete and expensive laboratories for the several engineering specialties. The students may study electrical engineering as a major study in preference to economics or history, and the cost of pursuing electrical engineering as a major study is little or no more than the cost of pursuing any other laboratory science, such as chemistry or zoology.

At Virginia Polytechnic Institute the regular four-year course in the several engineering branches is offered. An attempt is made by the institution to equip the laboratories adequately for these specialties. A brief inspection of the commodious mechanical engineering laboratory impresses one with the extent of equipment called for to pursue these courses efficiently. Expensive machinery must be installed and must be replaced from time to time, as new inventions appear or machinery falls out of date. The State cannot afford to have her engineers trained in any but thoroughly equipped laboratories; but to duplicate this machinery in order to train engineers in the fundamental mechanical aspects of the profession may be found upon investigation to be wasteful of the State's funds.

A similar situation is found in the electrical engineering laboratories, which must be equipped with the latest and best of electrical apparatus. The Virginia Polytechnic Institute, while undoubtedly in need of a completed electrical engineering building where but one story has now been erected, is, nevertheless, in a position to offer effective instruction in the laboratory aspects of these engineering subjects.

At the university, courses somewhat similar to those at Virginia Polytechnic Institute are offered, but with a little more emphasis on the non-technical aspects of the subjects. The numbers enrolled in engineering at the university scarcely warrant the duplication of the expensive equipment required for effective instruction. Without being sufficiently acquainted with the situation to warrant passing judgment as to the best solution of the problem, the survey staff call attention to the possibility of effective co-ordination between the university and the polytechnic institute without the elimination of the engineering curriculum at either place. By the terms of the Morrill act, the guiding purpose of the land grant college is to offer the type of education which serves best the needs of the industrial classes. Engineers in large numbers are necessary among the industrial classes. Such engineers should be allowed to secure engineering training without an undue amount of cultural education being required as a prerequisite. At the same time, the State has need of and should afford opportunity for, the training of engineers who have a broader scientific basis for their technical work, who have a broader cultural background in the light of which to

interpret their responsibilities to the State, and who can be expected to develop engineering education to a higher level by both research and teaching, as well as by filling positions of leadership in the profession. For the training of such a type of engineer, it seems likely that a somewhat different curriculum from the one required for the training of large numbers of practicing engineers may be called for. Such a curriculum based upon higher entrance requirements might well be established at the university. This curriculum might emphasize the basic sciences, advanced work in which must be available at the university for other students as well as for engineers. If in this curriculum it is found desirable that these students should have contact with the more elementary and expensive laboratory instruction, it seems possible that cooperation between the university and V. P. I. could be worked out so that such students might devote one or more terms to study at the latter institution. In short, it seems likely that by cooperation, which should be established between these two institutions, the apparent duplication may be eliminated and the functions of each so defined as to give to Virginia a system of engineering education which will be adequate for her purposes and little or no more expensive than it would be if it were all offered at one institution. But the survey staff believe that, unless coordination can be clearly and definitely established and duplication avoided, the University of Virginia should abandon its engineering courses.

2. Education in Law

For the maintenance of an adequate school of law, a very expensive library and highly-paid professors are necessary. It may be stated, therefore, that there is no justification in maintaining two law schools in Virginia at State expense.

Law courses are taught at the College of William and Mary and a law school is maintained at the University of Virginia. In looking carefully into the situation, it is discovered, however, that this does not involve either the type or extent of duplication which might at first be implied. The course in law at the College of William and Mary is one of the major studies in the school of citizenship. Every one will agree that no citizenship curriculum can be maintained without courses in such subjects as business law, commercial law, international law and the like. In short, it is the business of leaders in a citizenship State outside the legal profession to know many things about the legal structure of society. No one would seek to deny the right of students to study these courses, even though it is not their intention to follow the practice of law as a profession. The degree granted at William and Mary is not the typical LL. B., but a rather unique degree, "Bachelor of Law."

Another consideration must be kept in mind with reference to the instruction in law at William and Mary. An endowment was given to the college, the income from which must be spent, according to the terms of the gift, in providing courses in jurisprudence. The income from this endowment provides the salary of the professor, who gives the principal courses in law. The State, therefore, is relieved of much of the cost in offering these courses. But the survey staff believe that William and Mary should not expand its law courses so as to train practicing lawyers; it should restrict its work in law to jurisprudence that should be understood by all citizens.

3. Medical Education

Medical education is the most expensive type of education now offered by professional schools. The survey staff feel, however, that inasmuch as the independence of the two medical colleges—the one at the university and the other at Richmond—was established after extensive discussion only five years ago, it is not appropriate to raise the question for discussion again. The mention of the maintenance by the State of these two schools of medicine,

however, cannot be omitted when the question of duplication is under discussion. Many opportunities for cooperation between the two institutions are possible and some of these are already being taken advantage of. But much more can be done than is being done at present.

4. Graduate Instruction in the Arts and Sciences

While there is a movement spreading over the country tending to unite more intimately the junior and senior years in colleges of arts and sciences with the graduate work in these fields, and at the same time to make the separation between the freshman and sophomore years, on the one side, and the junior and senior years on the other side, more distinct; nevertheless, for a good many years to come the typical four-year course in arts and sciences will undoubtedly be the prevailing practice in undergraduate instruction in Virginia. Graduate instruction is the most expensive type of instruction in the non-professional fields, and it is a wise principle upon which the State should proceed to insist that until the demand for graduate instruction is much greater than it is at present, no work beyond the bachelor's degree should be offered in more than one institution. If a certain number of courses is needed to satisfy the requirements of undergraduate instruction in a department, such as history, for example, then additional courses are needed in history if the college offers a master's degree with a major in history. To offer these courses is found to be expensive because the number of students calling for them is generally relatively small. Advanced work should be offered at the university in all departments in which the undergraduate work is likewise offered at the university. In such departments, however, as agriculture, in which undergraduate work is offered at some other institution, graduate work in this department should be available at the latter institutions.

Data Concerning Size of Classes, Failures, Hours of Teaching, and Use of Classrooms

Table 37 shows that at the University of Virginia there were during 1926-27 two hundred and six classes with five students or fewer enrolled, and one hundred and eight classes with six to ten students. By referring to the figures at the bottom it will be observed that as many classes had fewer than twelve students as had more than twelve students. One-fourth of the classes had no more than five students, and one-fourth had no fewer than forty-one students.

All the students who were enrolled for the same subject or course constitute a class, regardless of whether or not they were divided into several sections. For example, if three hundred students were enrolled for college algebra, they were regarded as one class, even though they were taught in ten sections by ten different teachers. The primary object of the inquiry was to determine for what number of students each subject was maintained.

With the exception of the Virginia Military Institute, and to a lesser degree the Virginia Medical College, classes are maintained for very small numbers of students. A quarter of all the classes at the university have five or fewer students. A quarter of all the classes at the Virginia Polytechnic Institute have eight or fewer students. A quarter of the classes at William and Mary have seven or fewer students. This indicates a serious tendency toward over-specialization in many departments. It is doubtful whether undergraduate education is strengthened by such great differentiation of courses. Not only is the practice of too great differentiation costly in money, but it tends to defeat the main purpose of liberal and undergraduate education. In an institution where half the classes are taught for twelve students or fewer, as is true at both the university and at the College of William and Mary, such great differentiation cannot be justified. It has been shown that just as effective instruction can be given to classes of twenty-five as of five or ten students.

Percentage of Failures in College Classes

Table 38 shows the number of classes in the higher institutions conducted during the year 1926-27, distributed according to the percentage failing to make a passing mark at the end of the course. For example, at the university there were one hundred and forty-seven classes in which there were no failures. There were thirty-two classes in which from 1 to 5 per cent of the class failed. The median of six at the university means that there were as many classes with less than 6 per cent of failures as there were classes with more than 6 per cent. The 25 percentile means that there were 25 per cent of the classes with no failures. The 75 percentile means that there were 25 per cent of the classes with 19 per cent or more failures.

One is struck with the very high percentage of classes in which no students failed. More than 50 per cent of the classes in the Virginia Polytechnic Institute and in the College of William and Mary reported no failures for the year 1926-27. If that indicates a careful adaptation of the work to the capacities of the students and a stimulation of the students to uniformly high endeavor by superior instruction, it is a most creditable indication. If, on the other hand, it means a low standard of work which can be achieved by the very large percentage of students indicated in the table, it calls for readjustment. The fact that the Virginia Medical College has a higher percentage of failures than does any of the other institutions, in spite of the fact that medical colleges the country over probably fail fewer than do the academic departments, raises serious questions. Does the medical college admit weak students and then dismiss them after a trial? Or is the medical college maintaining unusually high standards of scholarship?

The Teaching Load

Table 39 shows the members of the teaching staff in each institution who had class assignments of each of the indicated number of hours during the spring term of 1926-27. For example, five members of the staff at the university taught no periods; three members taught two periods per week; five members taught five periods per week, and so on. The median of ten periods per week for the university means that half of the members of the staff taught ten periods or less per week and half taught ten periods or more per week.

The sheet upon which this information was gathered showed for each individual teacher the proportion of service to the institution which the instruction hours represented. However, because there seemed to have been no very common understanding of the division which each teacher indicated of his time, it has been impossible to take into account what the full-time service of a teacher would be if he devoted it all to instruction.

For example: A teacher teaching fifteen hours a week indicated, in some cases, that this constituted but a third of his task. Obviously such an answer indicates that the teacher assumed that his preparation for the fifteen hours of teaching was a part of his other duties. This table, therefore, disregards all other services and simply indicates the number of teaching periods. In order to combine laboratory and classroom teaching, each hour spent by the teacher in laboratory was regarded as six-tenths of a classroom hour. No conclusive evidence is available to justify the use of six-tenths, but such evidence as there is indicates that some such relation is correct.

Because of the large number of part-time teachers, the school of medicine in the university and the Virginia Medical College were both omitted from this table.

The fact that the median number of teaching hours at the university is less than at the other institutions is probably accounted for largely by the fact that university teachers are employed in a good many cases because of their ability as productive scholars, and it is expected that they shall devote considerable time to productive work rather than to devote all of their time

no teaching. This does not imply that teachers in the other institutions are not expected to be productive scholars, but it does mean that the emphasis in an institution which is developing its graduate work is placed more largely upon research than is the case in other institutions which are largely undergraduate in character.

The large number of hours of teaching by faculty members at the Virginia Military Institute should be considered in the light of the policy which prevails there of having classes divided up into small sections, thus allowing for close relationship between the teacher and the students. There is considerable difference between teaching small classes and large classes; and in an institution operating on the policy of the small classes, a larger number of hours of teaching per teacher is to be expected.

The number of hours taught at the Virginia Polytechnic Institute and at William and Mary are not far from the typical practice prevailing in undergraduate colleges throughout the country.

Use of Classrooms and Laboratories

Table 40 shows that at the university, for example, two classrooms were used ten or fewer times per week; five were used from eleven to fifteen times per week, and so on. This table reveals strikingly the much more crowded schedule of rooms necessary at the university than at the polytechnic institute. At the latter institution, thirty classrooms were used fifteen periods or fewer per week, while only sixteen classrooms were used sixteen periods or more a week. At the university, seven rooms were used fifteen periods or fewer per week, while thirty-seven rooms were used sixteen periods or more a week, and seventeen rooms were used twenty-six periods or more a week. This indicates a very urgent need of additional classroom space at the university if their present program is to be continued. In like manner, the Virginia Military Institute is making use of practically all of the classrooms there for twenty-six or more periods per week each. The laboratory rooms, on the other hand, at the Virginia Military Institute, are used only ten or fewer periods per week each. Inquiry should be made as to whether some of the laboratory rooms might not be used also for classrooms to supply the need for classroom space.

CHAPTER XXXVI

THE VIRGINIA MILITARY INSTITUTE

The survey staff have found it particularly difficult to make recommendations concerning the Virginia Military Institute. This institution enjoys high prestige among a considerable proportion of the people of Virginia. It has to its credit a long history of distinguished service. Some of the most eminent men of Virginia and of the nation, not only in military activities but also in various fields of civic usefulness, have had training at the Virginia Military Institute. It served Virginia and the entire South most loyally and efficiently in the War Between the States, and it served the nation just as loyally and efficiently in the World War.

But the survey staff believe that the conditions in Virginia and in the nation have so changed that the peculiar type of education afforded by V. M. I. is no longer needed; and the general purposes met by liberal education at V. M. I. can be adequately met by the university and the College of William and Mary. Originally, V. M. I. served Virginia and the South much as the Military Academy at West Point now serves the entire nation. The survey staff have not been able to secure evidence which indicates that there exists in Virginia or in the South today any situation which requires collegiate military training by a State-supported institution. The military needs of the nation that can be met only by a four-year collegiate education are adequately met by West Point. The men who are now being trained at the Virginia Military Institute do not engage in military service as shown in a preceding chapter in this report. Table 35, Appendix I, shows the present occupation of the graduates in the last five classes of the Virginia Military Institute.

Is the Type of Discipline Secured at the Virginia Military Institute Best Adapted to the Present-Day Social, Economic, and Industrial Conditions in Virginia?

The survey staff have been told that the chief benefit to be derived from training at the Virginia Military Institute today concerns obedience and discipline. It has been impressed upon the staff that military training is essential for the development of respect for and compliance with authority. The survey staff believe that this position cannot be maintained. On the contrary, they believe that a State-supported military institution tends in these times rather to encourage disrespect and opposition to authority than the reverse. The cadets in the Virginia Military Institute today do not have the same regard for authority that the cadets of a former day had. Their attitude toward military authority is not the same as in the case of the graduates of West Point. At the latter institution, the men realize that they are preparing for government service, while in the Virginia Military Institute they have no such intention. They are not deeply imbued with the military conception of obedience and respect for authority. The military element in their training is imposed upon them; it is not an essential factor in their education. The men who are found at the Virginia Military Institute today do not attend for quite the same purpose that the men of an earlier day did, and the spirit and atmosphere of the institution are not quite the same today as they were when the institute gained its prestige and secured the confidence of the people of Virginia and of the nation. This is not due to inefficient administration; it is due to the changed social conditions in Virginia and throughout the South; and no administration of the Virginia Military Institute can restore the conditions under which men formerly received training of high quality in the Institute.

During the progress of the survey, evidence was derived by the survey staff which further convinced them of the fact that the Virginia Military Institute is not well adapted to the conditions and needs in Virginia at the present time.

A number of cadets were dismissed from the institute for brutal hazing, whereupon the entire student body, except one member, struck in protest against authority. Such a proceeding in a military institution should be convincing evidence to the Virginia people that the claim that the Virginia Military Institute trains men in obedience and respect for authority more fully than other institutions is unfounded. The staff made inquiry of the officers of other State-supported higher institutions and they were unable to learn that brutal hazing is practiced in any of these institutions, or that the student bodies have at any time struck in defiance of authority. It is not probable that the students at the University of Virginia or the College of William and Mary or the Virginia Polytechnic Institute or any of the teacher colleges would show such disrespect for authority as to go out on a strike when students were disciplined for an offense against a reasonable rule. The survey staff interpret this episode to mean that the type of training received at Virginia Military Institute is not well adapted to the conditions in Virginia today.

What Shall Virginia do with the Virginia Military Institute?

It has been shown in previous chapters of this report that Virginia is not giving adequate support to any phase of the public educational work of the State. The rural schools, the elementary city schools, the high schools, the teacher colleges, the University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, the Medical College of Virginia—all need increased funds in order that Virginia may keep abreast of sister States in educational progress. In the circumstances, Virginia ought not to spend funds upon an institution which is not in a high degree meeting the educational needs of the State. The funds that the State is asked to appropriate for the maintenance of the Virginia Military Institute are sadly needed for the improvement of every department of the public educational system. When it is considered that there are children of compulsory school age who are growing up in illiteracy because they have no facilities for education; when it is further considered that teachers in all departments of the educational system are receiving salaries far below the standard in States with which Virginia is in competition and with which she wishes to keep abreast, so that they cannot make proper preparation for their work in the schools of Virginia, it seems conclusive that the State should no longer appropriate funds for the Virginia Military Institute.

The work in liberal arts which is being done at V. M. I. can be done in a more efficient way at the University of Virginia and the College of William and Mary. The engineering courses there can be conducted more efficiently at V. P. I. The boys of Virginia would not now be deprived of any educational advantage if the V. M. I. should be transformed into a different type of educational institution. Attention should be called to the fact that military training for men is provided at the Polytechnic Institute and it could be provided for and required of men at the University of Virginia and the College of William and Mary. If the people of Virginia wish that all young men in the State who are attending institutions of collegiate rank should receive military training, then R. O. T. C. units should be established at Charlottesville and Williamsburg. The purpose of military training could be attained more fully by requiring *all* the men in Virginia Polytechnic Institute, the College of William and Mary, and the University of Virginia to receive some military training than to have a comparatively few men subjected to it for four years at the Virginia Military Institute.

It is imperative that Virginia should establish a system of vocational education for high-school graduates who cannot enter a liberal arts or a technical college, or who are not well adapted for work in such institutions. The Virginia Military Institute could be, with but slight expense, converted into an institute for vocational training. Such a use of the physical plant at the military institute would meet a very pressing need in Virginia today, and this need will be even more pressing in the future.

CHAPTER XXXVII

HOW ADEQUATELY DO THE HIGHER INSTITUTIONS SERVE THE STATE?

At the outset of the survey, the staff set about to determine, so far as possible, to what extent the University of Virginia, the College of William and Mary, the Medical College of Virginia, the Virginia Polytechnic Institute, and the Virginia Military Institute were governed in their curricula, methods of instruction, and plan of organization and administration by objectives having to do with service to the State. As mentioned above, detailed statements have been secured from the chairmen of heads of departments or schools in each of the institutions concerning the aims which they have in view in the teaching of the respective subjects of which they have charge. Also, detailed statements have been secured from a considerable number of graduates of each higher institution regarding the benefits which they received from the courses pursued in their respective alma maters, and the situations in which they have been placed after graduation for which they were not adequately prepared by their college training. A canvass was made of citizens of Virginia in the effort to discover their views regarding the type of service which higher institutions should render to the State and in how far this service is being rendered now by each State-supported institution. Again, members of the staff in their visitations to each of the institutions of collegiate rank kept in mind the questions: What is this institution aiming to accomplish in its several colleges, departments, or schools? To what extent is the curriculum determined by the peculiar needs of Virginia? Is the spirit of the institution determined by the ideal of service to the State or by some other ideal? Are members of the faculty interested in and, so far as their time and energies will permit, occupied in the solution of material and social problems peculiar to Virginia?

What Does Service to the State Mean?

A study of the objectives held in view by the colleges and universities throughout America reveals the fact that there is considerable variation in their curricula, their methods of instruction, and their plans of organization and administration. But, hardly without exception, each institution believes that it is preparing its students for the needs of life. One type of college or university maintains that the best preparation a young man or woman can have for life consists in the acquisition of the knowledge which has been accumulated by the human race and organized into subjects or branches of instruction. In this type of college or university, students are occupied very largely in the learning of foreign languages, literatures, pure mathematics, pure sciences, and what might be called pure history, as contrasted with history that is designed to illumine present-day sociological and political problems. It is believed by those in authority that four years' training of this type will equip a young man or woman with knowledge that can be utilized in daily life, and especially that will develop mental power which can be used in solving the problems that arise in post-scholastic life. Further, it is maintained by members of the faculties in this type of college that the aim in higher education should be to transmit to youth the culture that has been accumulated during the progress of the human race from primitive times to the present, so that a young person may become acquainted with the thoughts, ideals, aspirations, ambitions, and achievements of his predecessors.

There is another type of college or university which has become prominent in America during the last two or three decades. The curricula, methods of instruction, and plans of organization and administration in this type of higher institution are determined largely by the objective of service to the Commonwealth in which each institution is located and by which it is maintained. In

the curricula, emphasis is laid upon subjects that seem to bear directly upon the problems encountered in daily life by the people of the State,—problems on the farm, or in the making of a home, or in the different trades practiced by the people, or in the management of towns or cities, or in conducting elementary or secondary schools, or in the endeavor of the people to find relaxation or recreation, and so on. In this type of institution, the methods of instruction are determined in considerable part by the aim of helping pupils to see how the knowledge they are acquiring can be made to function in solving problems that arise in typical situations in the daily life of the people. Students are set to work on problems or projects resembling those that are encountered outside of college, and they are not required to learn verbatim the contents of textbooks or references. Members of the faculties in these institutions have interests outside of their respective classrooms or laboratories; they look beyond the walls of the campus of the institutions with which they are connected in order to see whether they can participate in the task of bettering the physical, mental, social, and economic life of the people of the Commonwealth. In institutions of this type, students are encouraged to devote themselves to studies that are considered to have practical as well as cultural and disciplinary value.

Academic v. Functional Types of College Work

There are two terms which are coming to be used to denote the predominant type of work found in the different types of colleges and universities in America. The first term, *academic*, denotes that an institution, or a department or a school within the institution, is governed by the aim of culture or mental discipline in curricula, in methods of instruction, and in organization and administration. The second term, *functional* or *practical*, denotes a type of work in which curricula, methods of instruction, and organization and administration are determined by the aim of emphasizing knowledge and methods of instruction which have direct reference to actual problems in present-day life. It is not intended to say that in any one college or university the terms "academic," "functional," "practical" are applicable to *all* the work of the institution; but it is true that one term or the other indicates the *predominant* character of the work of the institution.

The tendency in higher education in America is toward a functional or practical type rather than an academic type of work. In the States that have made rapid advancement in material progress and social well-being, the State-supported colleges and universities have, during the past two or three decades, moved constantly in the direction of emphasizing a functional or practical program of work. It is believed by those who are determining the policies of the colleges and universities in these Commonwealths that a student can secure culture and mental discipline as fully by pursuing subjects that have functional or practical value as by pursuing those that are comparatively remote from the situations in which the student will be placed after graduation.

The Aim of Mental Discipline has been Abandoned

A special word should be added concerning mental discipline as a determining aim in college or university work. This aim played the principal role in determining curricula and methods of instruction in all institutions of America until quite recently, and it still plays the dominant role in some institutions. But it is being or has already been completely abandoned by State-supported higher institutions in Commonwealths that are going forward rapidly in the advancement of physical, mental, and social well-being among the people. It has been proven to the satisfaction of a large proportion of the members of the faculties in these institutions that the doctrine of mental discipline is fallacious. The human mind is not constituted so that the general power can be developed by specific, formal study; that is to say, the pursuit of any particular subject develops mental power in the special field covered by this subject but not in fields in which there are no common elements with this special field. To be specific, mental power developed in the study of spelling, say, is confined to spelling situations; and the principle is applicable to all studies whatsoever. The recognition of this psychological law

is leading the functional or practical type of higher institution to lay major emphasis upon studies and methods of instruction that will give students experience in classroom or laboratory as nearly as possible like the experience he will have after graduation. Further, problems for study in this type of institution are selected from the Commonwealth which maintains the institution. It is recognized, of course, that most of the problems with which a student will have to deal after he leaves college are found in all Commonwealths; it is recognized that the problems encountered today have been in some measure encountered in the past and a student will be helped to understand the present if he is made familiar with the past; but over and above the knowledge which is of universal value, and the knowledge derived from the past which will have present-day value, there is knowledge which concerns the present or immediate future and the immediate environment principally, and this is considered to be of primary importance in higher institutions dominated by a functional or practical objective.

Should a State-Supported Higher Institution Provide an Education for the Qualified Young People of the State for Their Own Advancement?

The survey staff in their field work have encountered two opposing views respecting the obligation of the State to provide a higher education for all the young people who desire it and who are qualified to take advantage of it. In Division X, there are presented the results of a survey of the views of Virginia citizens relating to the question of the responsibilities of the State in respect to the higher education of the young. Some Virginia citizens maintain that the State is under no obligation to give its young people an education free of charge so that they may promote their own economic and social well-being. These citizens hold that any boy or girl who wishes to secure an education in order to obtain economic and social advancement should bear the entire cost thereof. They believe that it is an injustice to require any citizen to help bear the expense of the education of any young person who seeks an education for his personal advancement. Citizens who hold this view have said to members of the survey staff that Virginia is already educating too many young men and women in higher educational institutions. They advocate curtailment of facilities, so far as State maintenance is concerned, so that there will be a smaller number of young people who will be educated in higher institutions at public expense.

On the other hand, there are Virginia citizens who assert that it is the duty of the State to provide a complete education for every young person who is qualified and eager to take advantage of such an education. They have said to the survey staff that no young person is responsible for having come into the world; but since he is here, he has a right to demand that he be given an education which will enable him to develop his talents to the utmost, whether or not he employs these talents in the service of the State.

There is a third group of citizens who maintain that the State will be the gainer by providing facilities for higher education for all young people who wish to take advantage of them, even if they employ the education they have gained for their own benefit, since they cannot promote their own economic and social welfare without promoting the welfare of the group among whom they live. It is held by this group that no person can get forward unless he serves his fellows. If his own fortune is increased as a result of the education he has received at public expense, it means that he must have been trained so as to be of great value to his fellows and so they have contributed to his prosperity. These citizens believe that the individual and the State prosper together; the one cannot advance without the other, and just to the extent that an individual is retained to solve problems that confront the people on the farms or in the homes or in the factories or in legislative halls, just to that extent they will be rewarded by the people whom they help and the people will be benefited in equal measure with the individual.

The survey staff hold the view that while, as a general rule, an individual educated at State expense who utilizes his education for his own advancement must contribute to the advancement of the State, still he can take an unfair

advantage in his relations with the State. He can charge too heavily for his services as a leader or adviser in the field in which he has been trained; as a skillful physician he can promote the health and well-being of the people whom he serves, but he can make the price for his service so high that many people in the State cannot take advantage of it, and he can plunder those who have means. This matter has been much discussed by State legislatures and by the faculties of State-supported institutions, and while there are some capable students of the problem who deny that the education of all qualified young people is of benefit to the State and who doubt the wisdom of educating all except a few leaders, still the majority of the people in the States that do provide a liberal or technical education for all young people who are qualified and who wish to take advantage of such an education believe that while there are exceptions to the rule, still the State on the whole is the gainer by offering a higher education to all qualified young people who are eager to secure it.

What Should Virginia do in the Matter of Providing Facilities for All Young People who desire a Higher Education?

At the present time Virginia is operating on the plan of providing higher education practically at public expense for all the qualified young people who apply for it. However, the State has not been able to provide adequate facilities for all the students who are seeking admission to the higher institutions. The survey staff have been told that students have been turned away during the present year from every State-supported higher institution because there has not been room or adequate equipment to take care of them. The faculties of higher institutions believe that it is the duty of the State to provide for all qualified young persons who seek admission, and they are asking for additions to their physical plants and to their equipment so that it will not be necessary to reject any qualified student. The staff believe that the physical plants at the several institutions should not be greatly increased for the present, though later on in this report recommendations will be made for additions to equipment at the several institutions, except the Virginia Military Institute, so that student groups of substantially the size now found at each institution may be adequately provided for with dormitories, with classrooms, with laboratories, and with libraries.

The survey staff believe that the needs of Virginia, so far as higher education is concerned, can be adequately provided for by maintaining higher standards in each institution. There are students in every institution who are not capable of doing satisfactory work of the character found in the institution in which they are enrolled. They take up room that could be occupied by students who are better prepared and who possess the type of ability that is required for success in collegiate work. In Table 41, there are presented the results of a psychological test of freshmen in the University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, and the Virginia Military Institute. It can be seen from an examination of the table that a considerable proportion of the students in each institution failed to attain a total score over 90 in the American Council Psychological Examination. The experience of colleges and universities outside of Virginia has shown that a student who cannot attain a total score of 90 or above in the psychological examination cannot succeed in collegiate work if reasonable standards are maintained. When such students are admitted to and retained in college classes, they operate as a drag on efficient college work. They derive but little benefit from the classes in which they are enrolled unless the work is adapted to their limited ability, in which case the abler students derive but slight benefit from the work.

Virginia should immediately establish a more rigid system of selecting candidates for admission to all the higher institutions. The records made by a student during his high-school course, together with the results of educational tests and the judgment of members of the faculty of the high school should be utilized in determining whether a student knocking at the gates of any of the higher institutions should be admitted. If this policy be followed,

there will probably be no urgent demand for expansion of the physical plant of any of the higher institutions during the next decade at least. Adoption of this policy will make it possible for each institution to serve better than it is now doing those students who are capable, on the basis of intellect and character, of doing high-grade work.

Different Kinds of Ability

It should be pointed out in this connection that the American Council Psychological Examination, or any other of the standard intelligence tests, cannot measure all types of ability. A student who makes a low score in an intelligence test may achieve a high score in work which does not require ability of an abstract or symbolic or linguistic character. It has been adequately shown during the past two decades that one may possess ability for abstract intellectual work but lack ability for concrete manual work, and the other way around. In Virginia there is slight recognition of this fact. It is shown in Division X of this report that there is no program of guidance in operation in the schools of State-supported higher institutions, though there is an efficient program of guidance in Washington and Lee University. It is shown also that Virginia has made very inadequate provision for vocational education. The survey staff believe that if the State would inaugurate an efficient system of guidance in the higher grammar grades and the high schools, with a view to diagnosing abilities and aptitudes of pupils in these schools, and if the State would in addition make provision for vocational education for those who are not suited for abstract, symbolic, linguistic work in colleges of arts and sciences or professional work in law, engineering, medicine, or education, there would be many young people who are now seeking admission to the institutions of collegiate character who would seek vocational education instead. This policy would operate to the advantage of the State as well as of the individual. A young person who might succeed very well in a vocation, but not having opportunities for vocational education, he is admitted to a course in liberal arts in a collegiate institution, for which work he is not well adapted by nature, is taken out of his element, so to speak, and is in a way unfitted for the type of service that he could perform to greatest advantage. He is injured personally by attempting work for which he does not possess the requisite ability. It is inevitable that one who is marked by teachers and fellow-students as inferior should in time become convinced of his inferiority, so that he cannot achieve on a high plane, and he is apt to assume an attitude of defeat and to conclude that he cannot succeed up to the standard of his fellows. Had he been directed at the proper time into a vocational school, he would probably have been able to maintain a good standard so that he would become dynamic in using the talents he possesses; and his character and his comfort and his usefulness in life, alike as a citizen, as a neighbor, and as a workman, would be improved.

Shall the Doors of the Higher Institutions be Kept Wide Open?

The survey staff have heard it said in Virginia that young people should go to college in order to secure mental discipline and culture, even though they gain nothing from their college work which fits them for any definite employment. But when a student emerges from a commencement hall with culture such as it is and with a training which fits him only for teaching or selling bonds and he cannot secure a position to teach or to sell bonds, and he must engage in some manual or at least inferior kind of work, he becomes an unhappy and discontented individual. His social contacts in college have built up barriers about him so that he does not enjoy association with people who have not had college experiences. He returns to his home town without employment and his culture does not make him an agreeable member of society.

No reader will, of course, think that what is said applies to a majority of college and university graduates. No one knows exactly what proportion of graduates do not find suitable employment and are discontented with their lot. But the point is that the proportion of such individuals has been increasing and there is reason to believe that it will further increase, because the enrollments

in higher institutions are increasing out of proportion to the increase in population. This constitutes the problem that confronts the State at the present moment, should Virginia encourage every boy and girl to complete a college course, and should college authorities welcome every one to the campus who applies for admission, regardless of what happens to him after he leaves the campus?

A considerable proportion of the graduates of the higher institutions have not been able to find suitable employment in the State and so they have been drifting out of the State. Actually the State is being drained of young men and young women to some extent, who are being educated in the higher institutions and are to some extent unfitted as a result of traditional college training to perform the sort of work that is most needed to be done in the State. The natural resources of the State have not been developed because each oncoming generation has been trained for culture and professional occupations; but the State cannot provide occupation for only a portion of these college-trained persons. Even so, many of the citizens of the State maintain that it is an obligation of the State to give every youth a higher education, even though he must leave the State in order to find occupation that is acceptable.

CHAPTER XXXVIII

METHODS OF INSTRUCTION IN THE VIRGINIA HIGHER INSTITUTIONS

The College of William and Mary, the University of Virginia, and the Virginia Military Institute, the first two especially, were founded at a time when it was universally believed that the objectives of higher education should be principally or wholly formal culture and mental discipline. For a long period after their establishment, collegiate education emphasized subjects of instruction and methods of teaching that were based upon the educational doctrine that a student would derive the greatest benefit from studies that were not directly connected with the physical, political, or social needs of every-day life. It was widely believed in our country until quite recently that foreign languages, especially the classical languages, theoretical mathematics, theoretical science and formal English and history were particularly well adapted to confer culture upon students and to sharpen or strengthen or polish their mental faculties.

Higher Institutions are Still Governed Largely by the Objectives of Culture and Mental Discipline

In Virginia more largely than in many other Commonwealths, it was formerly believed that only gentlemen designed to be leaders in the State should have the advantages of collegiate education. A gentleman, according to Virginia tradition, did not expect or desire to use his collegiate education directly in every-day affairs. Consequently and inevitably, a collegiate education became formal and disciplinary. The history studied in colleges was predominantly ancient as contrasted with the history of the Commonwealth. It was deemed to be more cultural and better for mental discipline to pursue the history of Greece or Rome than the history of Virginia or of any modern civilization. Further, it was considered that applied mathemataics or applied science or applied knowledge of any sort was less cultural and less valuable for mental training than pure or theoretical or abstract science or mathematics or any other branch.

This conception of collegiate education has persisted down to the present time, to some extent, in the three higher institutions which have been mentioned. It persists in the Virginia Military Institute more than in the College of William and Mary or in the university. Compared with State-supported higher institutions in most other States, the three higher institutions in Virginia would be classified as classical institutions, having culture and mental discipline as the main objectives in their work.

A New Era for the College of William and Mary and the University of Virginia

In both the College of William and Mary and the University of Virginia, an effort is being made by the present administration to modernize the curriculum, methods of teaching, and plan of organization of both institutions. The term "modernize" is used to denote emphasis upon subjects and methods that relate to and prepare for modern life, modern science, applied as well as pure, modern history, modern industry, and modern political and sociological life, all presented to students in a dynamic, functional way. It will be appropriate to quote here, with full approval, from the writings of President Alderman regarding the functions of a modern State-supported university; and interviews with President Chandler have convinced the survey staff that he entertains the same views of the service which a State-supported higher institution should render the State and that under his leadership the College of William and Mary is aiming to lay stress upon studies and methods of instruction which will enable students to understand and to participate in contemporary thought, life, and action in Virginia as well as in the country at large and throughout the world.

Says President Alderman:

"Our universities must interest themselves in the things which interest the people, no matter how homely or prosaic,—the Negro's cabin, the factory child, the village library, the prices current, the home, the field, the shop. The university is an agent of society, as completely public as the State capitol. Its glory is service to society. Its strength is sustenance by society. We who administer, govern, teach, are the servants of the people. The university must reach out into every hamlet, and touch hopefully every citizen, so that the home, the village, the field, the shop, may see the university for what it is,—an intellectual lighthouse not alone for the few who trim its wicks and fill its lamps, but for all the uncharted craft adrift upon the sea.

"Its duty is not alone to provide teachers, lawyers, doctors, and clean-hearted and clear-minded men,—it is that, of course,—but to provide as well experts in every phase of expansion in a complex time: In engineering, in commerce, in agriculture, in the domestic arts, in public health, in public transportation and public welfare generally. The university civilization should see beyond its walls the needs of an advancing civilization, and have both impulse and power to carry help to a free society, ever reaching out to higher levels. If they need to know how better to till the soil,—out of which all wealth must come,—and to carry forward an orderly economic life; if their thought is upon the health and physical well-being of community life; if they desire to build their schools and local institutions with wisdom and farsightedness; if they have need of the knowledge which will enable them to put beauty and dignity and spiritual value into their homes and lives,—their university should not fail them in these just desires, but should be an ever-present stimulus to their aspirations, and a tower of strength in elevating the standards of living. As the servants of the Commonwealth, the scholars and teachers of the university are at the call of the people.

"The ultimate mission of the State university in America will be to supply the brains, not only to the fortunate few who can repair to its walls, but to all the people who constitute the life of the State. The supreme duty of this generation in educational progress is to rise above institutional exclusiveness, and behold primary schools, colleges, technical schools, professional schools, and university, working together as one great beneficial agency, feeding, stimulating, guiding, understanding, and supplementing each other. The university may justly take its place as that coordinate branch of democratic government out of which may be drawn a body of experts and social-minded men, ever ready to undertake, to analyze, to understand, and to sympathize with the State in the making: who can organize the education of its children, foster economic organization in its moral life, vitalize and socialize the isolation of its country life; who can improve its agriculture and animal husbandry and aid in organizing its public revenues and give direction to its thought. More and more the university is seeking to emphasize the duty of the university to care for the State. The old idea was for the State to care for the university. If a State is wise and farseeing, it will demand of such accumulations of human energy and scientific material a service to the whole Commonwealth which will cause a deeper intelligence to filter throughout the State, and which will bring creative helpfulness to communities as well as to individuals. Those who govern the State, whenever they undertake large matters based on scientific needs affecting the public good, should immediately ask themselves what sciences can be got to promote their ends from their institutions of higher learning; and these should be commandeered (to use a military term) to help the State rather than be put in the position of thrusting themselves into the service of the people, whom they were brought into existence to serve."

However, the College of William and Mary and the University of Virginia, the former rather more than the latter, are still somewhat restricted

by their traditions. The College of William and Mary attaches more importance to Latin than to any other subject in the liberal arts course; if a student enrolls in this course without Latin preparation, he is required to make it up outside of his regular course. The University of Virginia does not insist upon this requirement, but it encourages students to devote themselves to the study of Latin in the secondary school. The survey staff have received a written statement from the head of each major subject or department in the University of Virginia and the College of William and Mary (as well as V. P. I. and V. M. I.) in which are presented the dominant objectives which are kept in view in the choice of topics, plan of organization, and methods of instruction in each subject. An analysis of these statements reveals the fact that at the College of William and Mary the chief objective is the attainment of culture; but "culture" is to be interpreted as meaning not only the acquisition of knowledge but the development of personality and character. Mental discipline is frequently mentioned in faculty statements received from the College of William and Mary. Statements received from members of the faculty of the School of Education and the School of Citizenship lay greater emphasis upon the objective of practical usefulness than is true of statements received from members of the faculty in other departments. It is clear to the survey staff that, taken as a whole, members of the faculty of the College of William and Mary are aiming to improve the individual as a person rather than to prepare him for service in any field, except that in the School of Education a student's training is in some measure, but not wholly, determined by the aim of making him an efficient teacher; and in the School of Citizenship the training is directed generally toward the rather elusive aim of helping the student to become a good citizen.

Statements from members of the faculty of the University of Virginia emphasize functional or practical usefulness as the governing aim in the teaching of various subjects more generally than is true at the College of William and Mary. Functional or practical values are not put in first place, though, at the University of Virginia in any of the departments of the college of arts and sciences, but they are put in first place in the departments of engineering, medicine, and law. In the department of education practical usefulness is put forward prominently. The university has several departments which are conducted wholly with reference to the practical needs in Virginia. Special mention should be made of the Institute for Research in the Social Sciences, the department of education, the summer quarter, and the extension division. A considerable part of the work in the department of graduate studies is designed to have functional value.

The work in the first two years of the Virginia Military Institute is determined wholly by the objectives of culture and mental discipline. In the junior and senior years engineering courses are pursued by the students, but the work does not prepare them for the practice of engineering; it deals mainly with underlying principles. A graduate of an engineering course is expected to use the knowledge he has gained in business or as a contractor or overseer of engineering work rather than as a practicing engineer; data presented in the table referred to above, showing the present occupation of graduates of V. M. I., bear out this statement.

The Virginia Polytechnic Institute was established to train men in the mechanic arts, in business methods, and in agriculture. From the beginning, its work has been governed by the objective of functional or practical usefulness. Its program and its methods resemble closely the program and methods of the leading land-grant colleges, which always lay emphasis upon agriculture and the mechanic arts. Originally it was expected that V. P. I. would train men for the practice of agriculture so that they would become actual farmers and apply practically the knowledge of farming which they had secured at college. At the present time, however, farmers are not trained at the Virginia Polytechnic Institute. Graduates of this institution engage principally in the teaching of agriculture or in the management of estates, to some extent outside of Virginia. Only a negligible per cent of the students at the Virginia Polytechnic

Institute actually become farmers and apply what they are taught in college. In order to meet the need of preparation for farming, there are vocational agricultural courses in a number of the high schools of the State. The work of these high schools is presented in detail in Division X of this report. These high schools can meet the requirements of effective training of young men for actual farming more fully than can the Virginia Polytechnic Institute. It will be necessary, however, to resist the temptation to prepare students for service as managers of agricultural estates outside of Virginia. Students in the course in agriculture in the Virginia Polytechnic Institute should be required to pursue courses that will fit them to meet the requirements of directors of vocational agricultural education in the high schools of Virginia.

A larger proportion of students in the Virginia Polytechnic Institute is preparing for the practice of engineering than for the practice of agriculture. The institution is well equipped to train men to become engineers. It should, however, resist the temptation to train men for engineering positions outside of Virginia. The survey staff believe that it will aid in the development of Virginia's resources if it will give special attention to engineering problems in Virginia. The staff recognize that most of the work in the training of an engineer is not affected by local conditions or problems; but at the same time, some part of the training of engineers should have specific reference to local conditions and problems. Men who are being trained for engineering should be made aware of the engineering problems that are peculiar to and that confront Virginia. These men should become imbued during their course with the ambition and desire to contribute to the development of the resources of Virginia through the solution of engineering problems peculiar to the State.

The survey staff solicited from the head professor of every subject or department in the Virginia Polytechnic Institute a statement respecting the objectives which determine the topics which are emphasized and the methods of instruction in each department or subject. The survey staff can commend the aims held by most of the members of the faculty, and they recommend that the faculty endeavor to realize functional or practical aims in the presentation of every subject even more fully than has been done heretofore. The present administration of the Virginia Polytechnic Institute is strongly in favor of making all the work in the institute practical without sacrificing scholarly accuracy or thoroughness. If space would permit, quotations could be made from the writings of President Burruss and other members of the faculty which show that at the Virginia Polytechnic Institute there is a strong sentiment in favor of making what is taught students take effect in their every-day life; and this applies to home economics for women as well as to agriculture and engineering for men.

The Methods of Instruction in most of the Departments in all the Higher Institutions Could be Improved

The survey staff secured from the alumni of all the higher institutions statements regarding their views respecting the efficiency of the work in their respective alma maters. Later in this report there are presented analyses and digests of the responses received from the alumni of each institution. It will be enough in this place to call attention to the fact that many of the alumni in all the institutions recommend that the method of teaching in most of the departments of the institutions should be improved. The survey staff did not attempt to make a detailed inspection of the methods of instruction in the various departments of any of the higher institutions; but in interviews with members of the faculties and in other ways they have become convinced that the recommendations of the alumni of these institutions are well grounded.

Outside of Virginia, progress is being made in colleges and universities in substituting the problem or project method of instruction for the formal lecture or mere recitation method. The survey staff have been told by members of the faculties of these institutions that the prevailing method of instruction in class-

rooms consists in the presentation of facts by lectures, supplemented by references to literature or the assignment of lessons in textbooks, and once a week or so an oral or written test is given to determine whether students have memorized the lectures and the literature of the contents of the textbook. Little or no opportunity is afforded for the development of originality, initiative, resourcefulness or dynamic ability on the part of the students. They are mainly receptive rather than dynamic or aggressive in their college work. This is particularly true of the methods of teaching in the courses in liberal arts in all institutions.

The staff believe that the schools or departments of education in the higher institutions are all breaking away from the lecture-textbook—reading-recitation method and substituting in its place a method which requires the student to become dynamic in the mastery of any subject which he is studying, and to use it in the way in which it is designed to be of service to him. The staff recommend that the faculties in the higher institutions should become organized for the purpose of studying modern progress in respect to methods of instruction under the leadership of the department of education in each institution. The staff believe that it is particularly desirable in the Virginia higher institutions to cultivate in students a dynamic or aggressive attitude toward knowledge in every field, so that they will take the initiative and become resourceful in the application of knowledge to the situations in daily life in the State. Virginia students are rather less dynamic in the use of knowledge than are students in other States with which members of the staff are familiar. The staff believe that if dynamic methods of instruction, which would stimulate students to become original and self-reliant in their college work, were generally adopted in the Virginia higher institutions, it would prove to be of inestimable value in leading the educated portion of the Virginia population to become aggressive in dealing with the actual problems which affect the welfare of the people of the State.

CHAPTER XXXIX

GRADUATE AND RESEARCH WORK IN THE HIGHER EDUCATIONAL INSTITUTIONS

The problem of graduate and research work in Virginia is a perplexing but very important one. The survey staff believe that any State which does not provide for graduate and research work of a certain type cannot keep abreast of progress in America. The States that have gone and are now going forward are making generous provision for graduate and research work in their State-supported higher institutions. The staff are not able to present statistical evidence to prove their view, but they believe that the States that have provided for research most generously have prospered most fully in material and social advancement. The staff made inquiry concerning this matter of prominent students of sociological and political conditions in the various States, and without exception the responses have reinforced the proposition that research and material and social progress go hand in hand.

It is recognized by the survey staff, of course, that one State may take advantage of research conducted in other States. Virginia has done just this to some extent. But it is recognized also that each State has peculiar problems which need investigation and which ordinarily will not be studied by investigators maintained by institutions outside of the State. It is true that some of the large endowment organizations have made provision for research in Virginia, particularly in the social sciences; but research is just as imperative in other departments of Virginia life and activity and adequate provision is not being made therefor.

It has been pointed out in earlier chapters that the natural resources and the climatic, scenic and other advantages of Virginia are not being fully developed and utilized for the benefit of the people of the State. This cannot and will not be done unless the State will make provision for research in the higher institutions.

Graduate work and research work are, or should be, phases of one and the same educational activity. Graduate work in Virginia should for the present be directed toward the study and investigation of problems pertaining to the material and social conditions and advancement of Virginia. It is not intended to imply that any university should be restricted permanently in its graduate and research work to conditions and problems existing within the boundaries of the State in which the university is located and by which it is maintained; but it is intended to say that Virginia is not now situated so that it can support much, if any, advanced work in higher institutions which does not look toward the improvement of material and social conditions in the State. In due course, when the resources and possibilities of the State have been more fully developed than they now are, the higher institutions may very properly extend the range of their graduate and research work to conditions and problems outside of Virginia.

Graduate and Research Work Except in Agriculture and Engineering should be Restricted Mainly to the University of Virginia

The survey staff believe that, considering the present economic and educational situation in Virginia, it is not advisable for the College of William and Mary to undertake graduate work, though it will prove to be of advantage to the State and a stimulus to capable members of the faculty if they are given leisure and facilities for research. But graduate and research work should, for the most part, be restricted to the University of Virginia, although the Virginia Polytechnic Institute should be equipped with resources for the investigation of every unsolved problem in agriculture and engineering in the State. Students of ability should be encouraged by scholarships to remain at V. P. I. after securing their bachelor degrees in order to undertake the investigation of technical agricultural and engineering problems in the State. The University of Virginia should be provided with adequate facilities for advanced work in research in every field,

except in agriculture and engineering. There is great need for research in the State in respect to education, the prevention and cure of disease, and the administration of government. The Medical College of Virginia could cooperate in the investigation of problems relating to the prevention and cure of disease in Virginia, but the major part of graduate and research work in this as in other fields should be undertaken by the University of Virginia; the resources of the latter institution should be increased and the teaching load of members of the graduate and research faculties should be lightened so that the university may be placed on a par with State-supported institutions in other States.

Research in the Teacher Colleges

The survey staff believe that there is an imperative need in Virginia for research in rural and elementary education. It has been pointed out elsewhere that Virginia possesses physical, climatic, economic, racial, and social characteristics which distinguish it to some extent from other States; but the State is not conducting research to determine the types of educational work which would be best adapted to its peculiar conditions and needs. Virginia is taking advantage in some measure of the research in other States pertaining to curricula in elementary, urban and rural schools, to methods of instruction, and to plans of organization and administration of schools and this can be highly commended; but unless the State conducts research on its own account so as to develop courses of study, methods of instruction and plans of organization and administration of schools that will best meet its characteristics and needs, it cannot expect to keep abreast of the States in which research work of this sort is constantly going forward. The State Department of Education has a division for research; but the activities of this division are concerned with the gathering of data in order to show what is actually taking place in the educational system of Virginia. The State department is not conducting any experimental work in order to determine whether improvements could be made in elementary rural and urban education.

The survey staff believe that research work should be provided for in all the teacher colleges as soon as these institutions are brought up to standard in respect to salaries for the instructional force and adequate facilities for practice work in rural and elementary education are provided. In Divisions VI and IX of this report, the salaries of instructors in the teacher colleges in relation to salaries in other States and the equipment of each of the teacher colleges are shown in detail. The first need in respect to these institutions is that they should be placed on a par with institutions in States with which Virginia is in competition and with which she desires to keep abreast in educational progress. The need for research work in the teacher colleges should be regarded as subordinate to the need for increased salaries and the establishment of facilities for practice teaching. When these primary needs are met, then the State should provide facilities so that each of the teacher colleges may engage in research work in elementary rural and urban education in the section of the State which it serves.

An Investigative Attitude of Mind is Greatly to be Desired

The teachers, who are sent out from the teacher colleges, should be led to take an original attitude toward their problems. Virginia cannot make necessary progress in education—cannot keep abreast of other States that are going rapidly forward—unless the teaching forces of the State are imbued with the notion that improvements in present educational procedure can and should be made. If teachers are sent out from training institutions convinced that final standards in educational work have been attained and that the work the teacher must do is to preserve the *status quo* in respect to courses of study, methods of teaching, and plans of organizing and conducting schools, then Virginia cannot hold its own among the States in educational development. The survey staff believe that this is the situation at present in Virginia. For the most part, teachers are not forward-looking, in the sense that they believe that the educational work of the State could be and ought to be made better adapted to the conditions and needs of the people than it is at present. Speaking generally, but allowing for occasional

exceptions, the teachers of the State regard the present system of education as completed, fixed, and permanent. They do not assume a dynamic attitude toward educational improvement. They take it for granted that what exists should be made permanent,—that it is their duty to preserve the system as they find it. This attitude must be changed in order that education in Virginia may be reconstructed in accordance with the needs of the State; and one way to accomplish this is for the teacher colleges—and for all institutions that train teachers, for that matter—to instill in the minds of teachers ideas which will make them original, dynamic, resourceful in modifying present educational practices so that the schools may meet the conditions in the State better than they are now doing.

CHAPTER XL

VIEWS AND RECOMMENDATIONS OF ALUMNI

In laying plans for the survey it was decided at the outset that in the study of the higher institutions it would be desirable to obtain views of the alumni respecting the benefits they received from their respective alma maters and what modifications, if any, they would advise to have made in the curricula, methods of instruction, and policies respecting organization, administration, and discipline in the different institutions. Accordingly, a questionnaire, a sample of which is included in Appendix II of this report was prepared and sent out to 250 alumni of each of the higher institutions, except the Medical College of Virginia and the Normal and Industrial Institute at Petersburg. The alumni to whom questionnaires were sent had been out of college for at least three years and not more than five years. It was decided that the views of graduates who had not had experience out of college for at least three years would not be of great value in respect to the question of the usefulness of the training which was received in college; and since the survey staff were interested only in the work which is being done at present in the several higher institutions, it was decided that the views of graduates of more than five years standing would not be of service because they would not base their opinions on the work which is being done in each institution at the present time.

The responses show evidence of genuine interest on the part of the alumni, and of unusual care in answering each of the questions in the questionnaire. There is no evidence of haste or carelessness in the responses that have been received. The survey staff believe that the alumni have cooperated to the utmost of their ability in furnishing information concerning the benefits they have derived from their collegiate education, and the changes they would like to see made in each institution in order that students may be better prepared in the future than they have been heretofore to meet the situations and solve the problems which they will encounter after graduation.

The responses of the alumni are presented here for what they are worth. The survey staff do not wish to attach too great emphasis to the value of alumni opinion. At the same time, the people of Virginia who have not had close contact with any of the higher institutions of the State have spoken and written to members of the survey staff expressing their opinions regarding one or another phase of the work being done in the different institutions. It seems to the survey staff that the opinions of the alumni of an institution regarding the value of the work of that institution and of desirable changes in its curriculum, and methods of teaching and discipline are entitled to greater consideration than the views of people whose opinions are based only on rumor. The survey staff have heard it said by citizens of Virginia that students who have graduated from one or another of the higher institutions have criticized the work and discipline of the institution and the staff regard it as fortunate that they are able to present written views of a considerable number of the graduates of each higher institution, except the Medical College of Virginia and the Normal and Industrial Institute at Petersburg.

Benefits Derived from College Training

A. Alumni of the University of Virginia.

Forty-six different benefits are listed, those most frequently mentioned are in the order of frequency:

- Preparation for profession
- Liberal education
- Broader knowledge
- Broader scientific training
- Better social relations
- Cultural education
- Philosophical training
- Analytical Training

B. Alumni of the College of William and Mary.

Forty-one benefits are listed, those most frequently mentioned are in the order of frequency:

- Broader views of life
- Better citizenship
- Better social well-being
- Enlarged knowledge
- Better judge of life's values
- Better work as a teacher
- Broader opportunities in life
- Better academic positions
- Better understanding of people
- Intellectual stimulus
- Thirst for broader knowledge
- Formation of character

C. Alumni of the Virginia Polytechnic Institute.

Eighty-nine different benefits are listed; those most frequently mentioned are in the order of frequency:

- Increased earning ability
- Preparation for engineering profession
- Fuller and more useful life
- Up-to-date and progressive agriculture

D. Alumni of the Virginia Military Institute.

Thirty different benefits are listed, those most frequently listed being, in the order of frequency:

- Discipline
- Obedience

Courses of Study That Have Proved to Be of Real Value**A. Alumni of the University of Virginia.**

Forty-one different courses are listed, those most frequently mentioned being, in the order of their frequency:

- Economics
- English
- Philosophy
- Mathematics
- Law
- Logic
- French
- History
- Chemistry
- Physics
- Ethics

B. Alumni of the College of William and Mary.

Fifty-two different courses are listed, those most frequently mentioned being, in the order of their frequency:

- English
- Education
- History
- Mathematics
- Psychology
- Biology
- Government
- Chemistry
- French
- Physics
- General Science
- Latin

C. Alumni of the Virginia Polytechnic Institute.

Seventy-eight different courses are listed, those most frequently mentioned being, in the order of their frequency:

- English
- Mathematics
- Public speaking
- Sciences
- Mechanics
- Military training
- Mechanical engineering
- Physics
- Shop work
- Agriculture
- Chemistry
- Horticulture
- Live stock judging

D. Alumni of the Virginia Military Institute.

Thirty different courses are listed, those most frequently mentioned being, in the order of their frequency:

- English
- Mathematics
- Business law
- Chemistry

Courses of Study That Have Not Proved to Be of Real Value**A. Alumni of the University of Virginia.**

Thirty-five different courses are listed, those most frequently listed being, in the order of their frequency:

- Spanish
- Mathematics
- Chemistry
- Commercial geography

B. Alumni of the College of William and Mary.

Forty-two different courses are listed, those most frequently listed in the order of their frequency:

- Education
- French
- Mathematics

C. Alumni of the Virginia Polytechnic Institute.

Twenty-four different courses are listed, those most frequently listed being, in the order of their frequency:

- German
- French
- Chemistry

D. Alumni of the Virginia Military Institute.

Twenty different courses are listed; those most frequently listed being, in the order of their frequency:

- Chemistry

Benefits From Experiences Outside of Classroom and Laboratory**A. Alumni of the University of Virginia.**

One hundred and one benefits are listed, those most frequently mentioned being, in the order of their frequency:

- Effect of honor system
- Sportsmanship-athletics

B. Alumni of the College of William and Mary.

Forty-nine benefits are listed, those most frequently listed being, in the order of their frequency:

- Personal influences and contacts with faculty members
- Athletics-sportsmanship
- Student associations
- Literary societies
- Participation in church activities
- Historic associations
- Contact with distinguished visitors
- Membership in fraternities

C. Alumni of the Virginia Polytechnic Institute.

Seventy-four benefits are listed, those most frequently listed being, in the order of their frequency:

- Literary and social life
- Military work—regular habits formed

D. Alumni of the Virginia Military Institute.

Twenty-four benefits are listed, those most frequently listed being, in the order of their frequency:

- Friendships formed
- Military training—regular habits, etc.

Needs Since Graduation which were not Provided for by Alma Mater**A. University of Virginia.**

Forty-six different needs that were not properly provided for were listed, the most frequently mentioned being as follows:

- Too little application of economics
- Lack of education in business
- Lack of practical work in law
- Lack of practical work in debating
- Not enough contact with entire student body
- Not enough moot court work
- Lack of practical knowledge of human nature

B. College of William and Mary.

Forty-four different needs that were not properly provided for were listed, the most frequently mentioned being as follows:

- Lack of training in appreciation of art and music
- Lack of practical school administration
- Lack of practical application of educational principles taught
- No training in public speaking
- Not enough practical psychology
- Not enough preparation for graduate study
- Courses in education not practical enough

C. Virginia Polytechnic Institute.

Fifty-three different needs that were not properly provided for were listed, the most frequently mentioned being as follows:

- A knowledge of human nature
- Knowledge of business methods
- More scientific training
- Training in salesmanship
- Lack of public speaking
- Farm economics
- Training in understanding responsibility to humanity
- Not enough training in English

D. Virginia Military Institute.

Twenty-four different needs that were not properly provided for were listed, the most frequently mentioned being as follows:

- Lack of training in public speaking
- Not enough modern knowledge
- Not enough study of business
- More study of business law
- Liberal Arts courses not well taught

Recommendations for Changes

It has been found impossible to tabulate the suggestions of alumni for modification of the curricula, methods of instruction, and discipline, of the various institutions. One hundred twenty-seven different suggestions were made by the *Alumni of the University of Virginia*. These suggestions tend to emphasize the need of better methods of instruction with less emphasis upon the learning of a large amount of facts without showing how they relate to the affairs of daily life. There is a tendency also to stress the need of more capable teachers, but for the most part the suggestions cover a wide range of details respecting changes in the work of the University as a whole and of special subjects, the abolition of secret societies, drinking, the exclusion of women, extension of library facilities, and a great many other details.

In the College of William and Mary, there were one hundred thirty-seven suggestions for changes in the entrance requirements, courses of study, methods of teaching and discipline of students, recommended by the Alumni of this institution, but it has not been possible to tabulate the replies. They tend to stress the need of more practical work in all subjects; less lecturing by the faculty and more initiative on the part of students; less emphasis on minimum requirements; improvement in the English and education courses; particularly in both of which there is too much mere theory and not enough work that can be actually applied; and granting students more freedom—less "spying" on students.

Alumni of the Virginia Polytechnic Institute made forty-eight different suggestions with respect to improvement of the courses of study, methods of instruction and discipline, but it is not possible to tabulate the responses. They tend to emphasize increased salaries for professors and allowances for traveling so that they can carry knowledge out to the people of the State; cooperation with actual engineering enterprises so that they can be tied-up with practice; abolition of foreign language requirements; less emphasis on military things and abandonment of military uniform; tied-up training in English; too many subjects required and not real thorough work in any of them; inefficient teaching with less emphasis on lecturing and more on teaching; less emphasis on academic subjects in agriculture and engineering; more attention given to experimental and research work.

Alumni of the Virginia Military Institute made forty-three different suggestions with respect to modification of the course of study, methods of teaching, and discipline of the students. It is not possible to tabulate the suggestions but the trend is in the direction of improvement in the instructional force, to be chosen on the basis of knowledge and ability to teach rather than on military grounds; training of students to think for themselves; less blackboard work in teaching; acquiring a working knowledge of foreign language; more freedom for upper-class students.

CHAPTER XLI

SUMMARY AND RECOMMENDATIONS

(1) In order to secure coordination and cooperation in the work of the University of Virginia, the College of William and Mary, the Medical College of Virginia, the Virginia Polytechnic Institute, the Virginia Military Institute (if continued), the four State teacher colleges, and the Normal and Industrial Institute at Petersburg, there should be created the office of Chancellor of Higher Education. The status and functions of such chancellor are outlined in Division IV of this report. In brief, the chancellor should be charged with the responsibility of securing coordination among the higher institutions so that the scope and character of the work of each institution shall be of the greatest service to the State and so that there shall not be needless duplication of work among the institutions. It is not intended that the Chancellor should deprive any institution of its independence or its initiative, or should assume the function of president or exercise control over the internal administrative work of any institution except insofar as the need for coordination in the work of the several institutions in order to secure economy and efficiency and to avoid wasteful duplication may require that an institution be restricted in the range of its offerings. The chief function of the chancellor should be to work out such a program of higher education that each institution will be responsible for the type of work that it is best equipped to perform and that is most needed by the State, regardless of institutional completeness or ambition. The chancellor should prevent any institution from expanding its program of offerings merely to become a complete college, university, or technical institute without regard to work done in other institutions.

If the office of Chancellor of Higher Education be established, then the recommendations that follow are made for his consideration; but if the office be not created, then the recommendations are urged by the survey staff for immediate legislative and administrative action.

(2) In order to avoid needless duplication, it is recommended that the engineering work now being done at the University of Virginia should, as soon as practicable, be transferred to the Virginia Polytechnic Institute, unless engineering work in the two institutions can be coordinated as indicated in a preceding chapter in this division; and that funds now devoted to engineering education at the university should be expended in the promotion of research work as outlined in preceding pages. Work in research is dealt with in a second recommendation farther on in this chapter.

(3) In respect to the College of William and Mary it is recommended that:

- a. All courses designed to prepare students for the practice of law should be eliminated. Courses in jurisprudence designed to give a knowledge of legal obligations, privileges, and procedures essential for a layman or citizen in daily life should be continued.
- b. No work of graduate standing or credit should be undertaken at the College of William and Mary for the present.

(4) At the Virginia Polytechnic Institute all work of the nature of liberal arts should be eliminated. Neither the course in business nor the course in home economics should be developed so as to require the offering of liberal arts' work, though courses basal for business or home economics should be offered.

(5) All liberal arts work as such should be restricted to the University of Virginia and the College of William and Mary.

(6) At the Medical College of Virginia all basal sciences or premedical work should be eliminated. Such work should be restricted to the Virginia Polytechnic Institute, the University of Virginia, the College of William and Mary, and the Virginia Military Institute (if this be continued).

(7) All undergraduate courses in any of the higher institutions except the Medical College of Virginia, with an enrollment of less than ten students for three

consecutive semesters should be discontinued. Tables showing in detail the number of classes with an enrollment of less than ten during the first semester of 1927-1928 will be found in Division XI of this Report. A summary and discussion of the data presented in these tables will be found in Division IV.

(8) As soon as practicable—immediately if possible and if such action will not work injustice to members of the faculty or students now enrolled—the Virginia Military Institute should be offered free to the alumni of the institute on condition that it be maintained at all times up to its present standard. If this plan is not accepted, then the institute should be abandoned as a military institution and the physical plant and equipment should be used for a junior college providing for vocational work and work in preparation for professional courses as outlined in Chapter LXVI, Division X of this report. If the institute is continued as at present, the State should not pay the board of any of the students. All students from Virginia should be treated in the same way as students in any other higher institutions receiving State aid.

(9) The University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, and the Virginia Military Institute (if continued) should emphasize applied science. The sciences should be accorded as prominent a place for entrance and for a degree as foreign languages, the English language, or mathematics. Faculties of the higher institutions should, so far as proper and practicable, encourage pupils preparing for college in secondary schools to devote their attention to the sciences—physical, biological, and social—as fully as to any other branch.

(10) The higher institutions should devote their resources to improving the work now being generally elected by students rather than to increasing the range of their offerings in order to become more comprehensive or complete universities. Each institution should be governed by the aim of serving Virginia rather than attaining institutional distinction by spending its resources in ways that are not urgently demanded for the promotion of the material and social well-being of the citizens of Virginia. No new course should be offered in any of the higher institutions until it is demanded by at least ten students; and as recommended above, no course should be continued that is not elected by at least ten students.

(11) The State should immediately enter upon a program which will rapidly bring the University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, and the Medical College of Virginia up to the standard of colleges in States with which Virginia is in competition and with which it desires to keep abreast, educationally and otherwise. This should be accomplished in one of the following ways:

(a) By continuing the present policy of appropriations to higher institutions and permitting all qualified students to enroll in any institution upon paying a nominal fee, and by increasing the salaries of capable members of the faculty at least twenty per cent, the maximum for a full professor to be \$6,000.00 and the minimum in the various classifications of the instructional force to be at least twenty per cent above what it is at the present time for competent instructors. If the Virginia Military Institute is continued as at present, the salaries of the faculty should be placed on a par with the salaries of members of the faculty in the other higher institutions so that capable members may be secured and so that it will not be necessary to replenish the faculty with graduates of the Virginia Military Institute who have not had much training or successful experience since graduation. If the institute is converted into a junior college, the salaries of the members of the faculty should be on a par with salaries in other higher institutions.

(b) If the State does not follow the policy indicated in (a) above, then it should provide only the physical plant and equipment for each higher institution and each institution should charge a tuition fee from non-State scholarship students adequate to provide a fund for maintenance on a par with the higher State-supported institutions in States comparable with Virginia.

(c) If the State follows the policy indicated in (b), a loan fund should be established for the purpose of enabling students of ability, but without means, to complete a course in any of the higher institutions. If such a fund be established, the Comptroller and the Director of the Budget should be responsible for presenting a plan for the administration of the fund which will meet the needs of Virginia.

(d) If the State does not wish to follow the policies indicated in (a), (b), or (c), it should adopt a plan of State scholarships to be awarded to entitle the holders to free tuition at any of the higher institutions. The State should determine the number of State scholars which should be granted free tuition at each of the higher institutions, and there should be appropriated to each institution an amount equal to the cost of the tuition of the State scholars in attendance. All students not holding State scholarships should pay a tuition fee to cover the cost of tuition. The same fee should be paid by out-of-State as by Virginia students not holding scholarships.

(e) If the State follows the policy indicated in (d) there should be constituted a committee composed of the deans of the departments or schools of education at the University of Virginia and the College of William and Mary, the State Superintendent of Public Instruction, and the presidents of the University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute, and the Medical College of Virginia, which committee should determine effective methods of selecting the most capable students in the State for State scholarships. It should be provided that the proportion of State scholarship students should be proportioned among the rural and city populations in proportion to the school population of rural districts as compared with the cities. Provision should be made so that men and women will be elected without discrimination as to sex.

(12) Whatever policy the State pursues in respect to provision for higher education, it should institute a system of selection so that only those students who possess in high degree the type of mental ability required for success in collegiate work should be admitted to any of the higher institutions. For all high school graduates who wish to continue their education but who are not adapted for collegiate work, or for those who do not possess the means to complete a collegiate course, facilities for vocational education should be provided. The State should promote the development of vocational guidance in high schools for the purpose of diagnosing the aptitudes of students and advising those who are not adapted for collegiate work to make preparation for the vocation for which they are best fitted.

(13) The State should immediately extend the facilities for the higher education of women in one of the following ways:

(a) By providing that women shall be admitted on the same terms as men to all courses at the University of Virginia.

(b) By providing that women properly qualified shall be admitted to the College of William and Mary in preference to men when there is not room for all those who make application for entrance.

(c) The conversion of the Harrisonburg State Teachers College into a college of liberal arts for women coordinate with the College of Arts and Sciences of the University of Virginia.

(14) Adequate provision should be made at the University of Virginia for research in the physical, biological, medical, and social sciences, including education. Provision for research in the social sciences is being made temporarily by private endowment; but when the funds from the endowment are exhausted, the State should supply the necessary funds to continue the work. At the College of William and Mary, provision should be made for research in the physical, biological, and social sciences, including education. At the Medical College of Virginia, provision should be made for research in the medical sciences. Virginia Polytechnic Institute now receives funds for research from Federal

sources; the State should supplement Federal funds by grants for research work as specified in (18) below.

(15) In the aid of research work, the executive officers of the higher institutions should be instructed:

(a) To adjust the teaching load of capable members of the faculty in the departments in which research should be encouraged so as to allow time for research work.

(b) Clerical assistance should be provided for research workers with a view to reducing the time devoted to routine and clerical work.

(c) Productive research should be rewarded by suitable promotions in rank and increase in salary.

(d) Leave of absence with pay should be granted for research workers who have shown that they can utilize leave of absence for the promotion of their research work.

(e) As rapidly as possible research professorships should be established.

(f) Members of the faculty should be aided for financial assistance to attend the meetings of learned societies in their particular field so that they may be stimulated and encouraged to do productive work.

(16) Research work in each and all the higher institutions should for a considerable period be directed toward the promotion of the material and social advancement of Virginia. Funds for research should be expended for work having to do with Virginia physical and social conditions rather than for pure research having no immediate or direct reference to conditions in Virginia. In due course, funds should be provided for research in every field of knowledge without special reference to Virginia problems; but research of this type should be deferred for the present.

(17) The State should not contribute to the support of junior colleges that are established as extensions of high school courses. State junior colleges should not be established until the rural, elementary, secondary, higher and teacher-training institutions are put on a par with the public school system in States with which Virginia wishes to keep abreast. If the Virginia Military Institute is converted into a junior college, the State should give it adequate support, so that it may receive high school graduates and prepare them for vocations and also for professional courses.

(18) In addition to needs specified above, the higher institutions are imperatively in need of the following:

a. The University of Virginia:

1. Increase of salaries of capable members of the faculty at least twenty per cent with maximum of full professor raised to \$6,000.00.

2. A dormitory for women students.

3. Dormitories adequate to accommodate all freshman students at least.

4. Adequate laboratory facilities for the teaching of pure and applied science, especially the latter.

5. Adequate provision for research in physical, biological, medical and social sciences, including education, with special reference to problems in Virginia.

6. Adequate provision to care for all graduate work of the State both for men and for women.

7. A fund for repairs adequate to repair and preserve the older buildings and keep them intact for the future.

8. Practice schools of elementary and secondary grade so that the school of education may train high school teachers and also superintendents, principals, and supervisors.

9. Adequate resources for the expansion of extension work so that the university may serve any community in the State requesting extension service.

b. The College of William and Mary:

1. Increase of salaries for all capable members of the instructional staff at least twenty per cent with maximum for full professor raised to \$6,000.
2. Facilities for the school of education to provide practice work and prepare teachers properly for high school, supervisory, and administrative positions.
3. A full time professor in secondary education.
4. A building to house the school of education and departments of home economics, fine arts, and physical education.
5. Addition to the staff of the school of education of supervising teachers in charge of students preparing for teaching positions in the State.
6. A fund to strengthen the summer school so that capable instructors may be secured. The salaries for instructors should be increased at least twenty per cent beyond what the practice has been heretofore.
7. Adequate provision for expanding the extension department so that the college may carry on extension work in any community in the State which desires such work and which can provide a sufficient number of students to warrant the organization of classes.
8. An adequate fund to repair and preserve the older buildings on the campus to the end that no one of these buildings may be allowed to disintegrate.
9. An adequate fund to provide for maintaining laboratories in pure and applied science, especially the latter.

c. The Virginia Polytechnic Institute:

1. Increase of salaries for all capable members of the instructional force at least twenty per cent with maximum for full professor raised to \$6,000.00.
2. Adequate provision for a fund to supplement Federal funds for the promotion of research in every phase of agriculture and engineering in Virginia.
3. Funds adequate to provide for instruction in and encouragement of horticulture, dairying, poultry producing, trucking, veterinary science, forestry, development of water power, rural electrification, and the use of power and machinery on the farm and in the farm home.
4. A fund adequate to complete a soils survey of the entire State and the dissemination of the facts gained and their bearing upon agriculture of the State through publications and institutes.
5. A fund to promote investigation of and instruction in rural social science and the dissemination of knowledge in rural sociology among the rural population of the State through publications and institutes.
6. Adequate provision for expansion of extension work in agriculture, engineering, and rural sociology.
7. A fund for the maintenance of summer work in home economics and rural social service.
8. A radio broadcasting station for the purpose of broadcasting information designed to disseminate knowledge which may be of interest or value to rural people.
9. Adequate provision should be made for resident and extension service in industrial chemistry as it relates particularly to conditions and possibilities in Virginia.
10. Provision should be made for instruction in coal mining and in architectural and structural engineering adapted to the conditions in Virginia.
11. The institute should be adequately equipped for resident and extension instruction in all branches of applied science affecting home and farm life.
12. The institute should be equipped to give instruction in business methods essential for the rural population, including cooperative marketing but not including commercial or industrial work.

13. The institute should have an adequate fund to provide dormitory facilities and laboratory, instructional and practice facilities for home economics so that women may receive a modern training in all phases of this subject.

d. The Medical College of Virginia:

1. Salaries adequate to secure and retain competent and capable full time instructors.

2. Adequate provision for extension service in the health field, to the end that the resources of the college may be made available to people in any section of the State. A fund of \$5,000 should be provided immediately for this service and should be increased as the demand increases.

3. The State public health laboratory should be assigned to the college and be maintained by the State, to the end that health problems peculiar to Virginia may be studied in the laboratory.

4. The Medical College should be equipped adequately for research in respect to diseases peculiar to Virginia.

5. The college is in need of enlarged provision for dental education. There should be an immediate addition of one full time instructor in this department.

6. It is imperative that a school of nursing should be maintained at the Medical College with special provisions for pediatrics and obstetrical nursing.

7. The Medical College has secured its physical plant largely from private gifts. The State should immediately supplement what has been received from this source by providing a new laboratory for chemistry, pathology, and bacteriology, and a building for clinical dentistry. As soon as possible, the State should provide dormitories for men students and extend dormitory facilities for women, if the enrollment of women at the college for nursing or medical education increases.

DIVISION V

Teacher Training and Certification

CHAPTER XLII

VIRGINIA'S INVESTMENT IN EDUCATION

In 1924, the value of school property in Virginia was \$50,105,816, and during the same year the total expense for public schools, exclusive of payments on debts, was \$20,306,675. These are large figures. Education in Virginia costs, and yet in respect to expenditure per child and the educational opportunities offered by Virginia to her children, Virginia ranks in the lower fourth of the forty-eight States, and although the total amount of school expense is large, it is not large enough to meet the pressing educational needs of the State. We are perfectly safe in assuming that the value of school property will increase and that the expense for the maintenance of schools will also increase from year to year in Virginia as well as in other States.

But these two items of schools costs are not all. To them should be added the financial burdens which thousands of homes are carrying on account of keeping children in school who might be very largely or wholly self supporting. And to this tangible wealth must be added the spiritual values of the ambitions and future possibilities of childhood and youth and - the hopes and expectations of parents and friends. Virginia is putting not only material wealth but spiritual wealth into her schools.

Virginia's Educational Problems

There are two pressing educational problems before the people of this State. The first problem is to make their investment in education yield commensurate returns, and the second is that of increasing the amount available for education; for this survey will show that the schools of Virginia, from the country school to the university, are in need of increased revenues to bring them up to the general standard of education in America, and to offer better opportunities to the boys and girls of the State. The second question is discussed in another chapter of this survey and so will not be treated here.

The first problem, then, before Virginia, is how to make the millions invested in public school property and the other millions spent yearly for the maintenance of public education increase the wealth of the State and add to the welfare and happiness of its people. This is a straightforward business proposition. If this money were invested in an industrial plant the procedure necessary to make it yield dividends would be as follows: Elect a board of directors composed of forward-looking, capable business men; set up a modern plant and install modern machinery; select a general manager and an executive staff of first-class ability; employ foremen and operatives who are skilled and efficient; and create a sales department that will dispose of the product. This is the method of modern American industry. Its successful operation can be seen in thousands of plants throughout the country.

A little reflection will show that to a surprising degree this program of industry is applicable to public education, but it is difficult to demonstrate its applicability. It is impossible, for example, to set up a system of educational accounting which will exhibit to the public in a convincing fashion, by ledger balances in black or red, the profits or losses, in a school system, for the products of education are many and complex and some of them are to a great degree intangible. Education produces wealth, but it also increases knowledge and skill and develops ideals and appreciations and attitudes of mind. Educational science has reached the stage where it can with a fair degree of exactness measure the mental ability of children and their progress and proficiency in the school subjects and skills, but it cannot evaluate with precision the achievements of boys and girls in the development of character and tastes and loyalties which are necessary to good citizenship. And if it could measure these qualities there would still remain

the problem of how much credit for character and tastes and loyalties should be given to the school and how much to the home and other educational agencies. Without question, one of the weaknesses of educational appeal to the people of the State is the inability of the schools to prove to a hard-headed and questioning public their economic and social values.

Education Produces Wealth

Do schools produce wealth? There is no exact bookkeeping to show, but the fact remains that the educated group in any community earns more than the uneducated; that the States which in the last fifty years have put the most money into their schools are the States which today have the largest per capita accumulated wealth and are producing the most wealth per capita; that the nations of the world that have the best schools are the richest nations. Before the white man came to North America the native tribes were in possession. Our vast natural resources were here but the natives tribes were unable to develop them and they lived a miserable, hand-to-mouth existence. The white man brought his accumulated knowledge and his schools. He had the knowledge and the skill to use the resources of this great continent and has made it the richest region of the world. While a ledger account marked Exhibit A cannot be offered to prove that education increases wealth, the concrete evidences of that fact lie about us on every hand. In other words, ignorance spells poverty and education spells wealth for the individual, for the group and for the Nation.

The Importance of the Teacher

In an industrial plant the ultimate source of production is the individual machine manned by an operative. It is this individual workman and the individual machine which transforms the raw material into the finished product. Analogously, in the process of education it is the individual teacher in contact with the individual child that brings educational results. Every dollar which Virginia invests in education is unproductive until it functions through the work of an individual teacher. Buildings, equipment, superintendents, and supervisors exist for just one purpose, and that is to increase the efficiency of the teacher. A good teacher spells school money saved and hopes of parents realized; a poor teacher spells school money wasted, time of children wasted, hopes of parents unrealized. It follows that if Virginia wishes to get returns on the millions she is investing in education, she must create and maintain a teaching staff that will be capable and devoted. The reports of inspection of teaching in the elementary and high schools of Virginia made by the survey staff show that of the teachers inspected about one-third could be marked good, one-third fair and one-third poor. Probably this would hold true of many other States, but that does not help the situation in Virginia. The fact remains that hundreds of thousands of dollars and precious years of childhood are being wasted through poor teaching. How may this condition be improved and this waste stopped? The obvious answer is to increase the quality of teaching.

In order to create and maintain a teaching staff of quality that will satisfy the needs of Virginia, the following conditions must be met:

1. The supply of teachers must be adequate to the demand.
2. Teachers should be well-prepared before they begin teaching.
3. The staff should be kept intellectually alive and growing.
4. Teaching should be effectively supervised.
5. The school buildings and grounds should be sanitary, serviceable and attractive.
6. Living conditions of teachers should be comfortable and agreeable.
7. Adequate salaries should be paid.
8. A retirement fund should be established.

Teaching a Special Social Service

Teaching is a special service unlike that rendered by any other class of social servants. The school is the second home of childhood and teachers are next to fathers and mothers in their influence in developing boys and girls. Teachers as individuals are no better than any other people and are entitled to no more consideration than are other classes who serve the community; but as a group they are distinct in that they render a peculiar service which is next to the home in its contribution to social welfare. This fact must be constantly borne in mind in order to rightly understand and rightly deal with the teaching profession.

Teacher Supply

It is unnecessary to argue that there should be enough teachers in the State to insure that a teacher shall not have too many children under his charge. There is no such thing as mass education. Children and even the older pupils need the personal attention of the teacher. Each pupil is a unique individual with his own endowments and limitations and must be studied and understood by the teacher if the best results in education are to be obtained. It is the general opinion of experienced teachers that more than thirty pupils to a teacher lessens the effectiveness of the teaching and thirty-five is the upper limit which should be permitted.

Teachers Must be Trained

Teachers must be adequately trained before they enter the service. It is well known that practically ninety per cent. of the teachers in America are women. This holds true of Virginia and the inevitable result of this situation is that teachers are transients in the profession. It is probable that the average length of service of a teacher in Virginia does not exceed six years, and in many counties of the State one-third of the teachers are new every year. This means that if returns are to be secured on the millions invested in education the teachers must be well prepared before they enter upon their work. If teachers were in service ten or more years it would not be so serious if they began teaching with limited preparation, as they would give, after experience had fitted them for their job, a number of years of productive service in return for the opportunities which the State had offered them. But such is not the case. Unquestionably the ultimate ideal is four years of college preparation for every teacher, but this standard is far in the future, even for the most favored of our States. But it soon will be possible for many of the States to require two years of preparation beyond the high school for entering upon teaching. Some States already have this standard. The State Board of Education Bulletin for January, 1927, contains the following statement:

"The State Board of Education has authorized the Department of Education to raise standards for the teaching profession, in order that by 1931 the Elementary Certificate, requiring at least one year of professional training of college grade, will constitute the minimum legal license for teachers in the elementary grades." High school teachers in Virginia will be required to have a full four year college course. This forward-looking program is a credit to the State and having made so good a start, Virginia should look forward to the time in the very near future when the lowest grade of certificate would be issued on not less than two years of professional training in college.

Teachers Should Keep Growing

No teachers college, however good, can turn out teachers that are mature and experienced. Time and teaching alone can accomplish that end.

It is also safe to say that in no profession is it so easy to stagnate as in teaching. The lawyer is matching his wits every day with men as good or better than himself. Every case presents a new problem for him to study and solve. The doctor is in competition not only with disease but with members of his own profession. Moreover, the doctor and lawyer must have a thorough education before they are admitted to practice. With the teacher it is not so. His work is not with equals or superiors but those who are inferior in age and intelligence. His pupils do not dare challenge his authority or question his statements. There are few, if any, in the community with sufficient knowledge of the public schools to intelligently question his policies, and as a rule he is not so well educated for his work as the doctor and lawyer. Under these circumstances it is distressingly easy for a teacher to stagnate. Competent authorities have stated that many teachers do their best work in the third or fourth year of their teaching experience and then they go to sleep on the job. In order to keep alive a teacher must continue to study and certification laws should be so framed as to require teachers periodically to earn additional credits in order to have their certificates renewed, at least until their preparation has been so extended as to give assurance that their intellectual interests will keep alive.

Efficient Supervision

No teaching staff can be kept at its best without adequate supervision. Here the analogy between the factory and the school holds good. The better the supervision the better the teaching and the greater the returns on the money put in education. Other sections of the report of the survey staff will show that Virginia has not given sufficient attention to the matter of supervision of schools. Many of the teachers who are now doing indifferent work and many who are doing positively poor work could be developed into creditable teachers if they were placed under the supervision of competent and inspiring leaders. Not only is there not enough supervision, but many of the superintendents, principals and supervisors have not been properly trained for their work. The most outstanding thing a school principal has to do is to develop the teaching capacity of the force that works with him, and yet the fact remains that many of these superintendents and principals have had little or no preparation for supervision, especially in the elementary grades. It is altogether too common to put in the principalships and superintendencies men who have graduated from college but never had an opportunity in their college course to study elementary education. Fortunately, the rule in Virginia is to appoint no one to a supervisory position who has not had three years of experience. That is something, but these three years of experience may have been in high school and consequently not have furnished any opportunity for the study of the administration of the elementary school and methods of teaching elementary school branches. The staff believes that every superintendent and principal and supervisor should have had special courses to fit him for his work. It also holds that it is as necessary for supervisory officers as it is for teachers to keep growing, and it consequently recommends that summer school courses at the University and the teachers colleges include special courses for supervisors and superintendents and that attendance be urged and, if necessary, required.

Wholesome School Conditions

Teaching conditions should be sanitary, serviceable and attractive. No teacher can develop the finest enthusiasm and joy in his work if he is compelled to teach in dilapidated school buildings which are a discredit to any respectable community and if he is lacking the necessary tools to do his work. There needs to be a State wide revival of interest in better school housing, better equipment and more sanitary and attractive surroundings. For six hours of the day and for several months of the year, teachers and

children live in the schoolhouse. It is their second home. It should be kept in such condition that they will respect and enjoy it. A teacher must have appliances with which to work—blackboards, supplementary readers, maps, library and the like. Without these tools it is impossible to conduct a first-class school.

Living Conditions Must be Comfortable and Agreeable

The living conditions of teachers must be comfortable and agreeable. This is particularly a problem of the country rather than of the city. In the cities it is possible for the teacher to secure good living conditions but in many of the country districts in some of our States it is otherwise. Virginia is no exception. It is often true that the best homes in the district are not willing to take the teacher as a member of the family. It is also often true that the available boarding places are so far from the school that the teacher is compelled to walk a considerable distance, often through mud and disagreeable weather.

The coming of good roads will improve the situation but today it is so serious in Virginia that many graduates of teachers colleges will remain without a position before they will accept a place in certain country districts. The survey staff do not know any immediate remedy for this condition. Writers on this problem have frequently suggested that the State build teacherages which shall be conveniently located and homelike, but until Virginia is able to build better schoolhouses and pay better wages it seems idle to talk about teacherages. A very few counties could perhaps build them, but it is altogether likely that the counties that could build teacherages could furnish good living conditions for the teachers. The most promising solution of the problem is better wages. Teachers are willing to endure a great deal if they are well paid, but they will not stand for both poor wages and poor living conditions. With the coming of good roads, teachers could live in nearby towns where suitable accommodations could be found. While the staff believe that it is best on the whole for teachers to live in the districts where they work, they think it entirely wrong to insist upon this unless the district is able to furnish comfortable and agreeable homes where the teachers are welcome.

The Salary Question

The average salary for teachers in the counties of Virginia in 1925-1926 was \$630, and for the cities \$1,230, and the general average was \$772. While it is not logical or fair to compare salaries in different communities and different States unless the cost of living and other factors are taken into consideration, it is nevertheless evident that in Virginia teachers in the cities are better paid than teachers in the country. The result is that the better trained teachers go to the city and the poorly trained too commonly go to the country. As was stated in the paragraph above, there are today a goodly number of teachers who are out of positions because they cannot afford to teach for the salaries which some of the counties are paying. These teachers have been educated at State expense, yet the State is receiving no direct return for the money invested in their education. Some may be disposed to censure the teachers, but that is not just for a teacher is entitled to more than a mere existence. The salary of a teacher, whether man or woman, should enable him to carry life insurance, to keep up his professional growth, and to put a little by against sickness and old age. No reasonable person will be disposed to deny this.

Some of the counties have not the wealth to sustain their schools through a full school year and pay reasonable salaries. This situation is not peculiar to Virginia but exists in a large proportion of the States. The remedy lies in the consolidation of schools and in State aid to the weaker counties. A million dollars of State aid for equalization of educational op-

portunities would be the beginning of better days for many of the impoverished school districts in Virginia. The ideal for every one of our forty-eight States should be a square deal for every child of the State. Within a State the strong must help the weak. The cities which are the centers of wealth should consider this fact, that during the years of childhood when they are financial liabilities children of the country are cared for by their local communities but when they grow up and become financial assets they go to the industrial centers to live and produce wealth.

Teachers Grow Old

These facts are patent to every observer; that most teachers are unmarried women; that they receive small salaries; that they should be women of education and refinement who must live at a fairly high standard in order to be the type of teacher that the State wants; and finally, lamentable though it may be, that they grow old and should retire. Since they are unmarried they have no children to care for them and, if they are sixty or more, their immediate friends very likely have passed on. They have given their life to teaching, they have no accumulated resources to live upon, and they must be cared for by brothers or sisters, nephews or nieces or even more distant relatives, or by charity in some form. In case of men who have reared a family on the limited salary of a teacher, the situation is often quite as distressing. It is because of this that school boards out of kindness of heart retain old teachers after they should have been retired. Many of our big business and industrial organizations realize that anxiety regarding the years of forced retirement lessens the productive capacity of their operatives and so retirement systems have been established. Retirement provisions for soldiers, sailors, policemen and firemen are generally approved. The public is coming to recognize the unique service which teachers render society and in all but sixteen States retirement legislation has been enacted, and in half of these sixteen local units, cities or counties have adopted retirement provisions. Virginia has made a beginning. It will strengthen her educational system to expand and make more adequate and effective her system of retirement.

CHAPTER XLIII

THE SUPPLY AND THE TRAINING OF TEACHERS

Up to this point we have considered the need of good teachers and the conditions which must be met if a capable teaching staff is to be secured and maintained. This brings us to the consideration of the present teaching staff of the State. During the session of 1924-25 there were 16,487 persons teaching in the public schools of the State and an enrollment of 554,079 pupils. If this enrollment had been distributed equally there would have been thirty-four pupils to a teacher and the situation would have been very satisfactory. But unfortunately the facts are otherwise. Table 42 gives the average number of pupils under the charge of each teacher for the counties. In the white schools the situation is on the whole satisfactory, although sixteen schools had an enrollment of more than forty per teacher. The figures for Alleghany county—222 pupils per teacher—seem incredible. The Negro schools make a far poorer showing, with sixty schools having an enrollment above forty, and thirty-two schools with an enrollment of fifty or above. Again Alleghany with an average of 238 pupils in one-room schools and 344 in two-room schools, makes one doubt the figures or wonder whether Alleghany county is in the United States or dreamland.

From available data it seems certain that Virginia has enough licensed teachers to staff her white schools, though many of them are not so well qualified as they should be. It is equally certain that the State is short of teachers for her Negro schools, and this is due to the lack of facilities for the training of teachers. In the first place, there are not enough Negro high schools to prepare prospective teachers for college; and in the second place the Normal and Industrial Institute at Petersburg would be unable to admit more students even if they were knocking at the door. The need of more Negro secondary schools is appealing and should receive early attention.

Qualification of Teachers

Table 43 gives the distribution of certificates for Virginia teachers for 1924-25. The collegiate certificate is given to persons who have completed a college course; the collegiate professional to one who has completed a college course and has taken as a part of that course the minimum of courses in the department of education; the normal professional certificate is granted on the completion of two years of college work which includes professional courses; the elementary certificate is issued on the basis of three-quarters of resident work or on examination. Special certificates are issued to persons who have earned two years of college credit and have done the minimum of college work in the particular branches which they are to teach. Courses in health education are required for all these certificates. It appears, then, from Table 43 that 6,442, or more than thirty-five per cent, had at least a year of college work beyond high school, and most of the number had taken professional work in education. If we add to this number the 1,555 who held special certificates we have a total of 7,977, who with very few exceptions had college work directly applicable to teaching. This approximates fifty per cent. During the last two years the colleges of the State have turned out an increasing number of graduates. This justifies the action of the State Board of Education already referred to increasing the requirements for certificates. Virginia has made a noteworthy advance in the preparation of her teachers and she should keep moving in the right direction.

In a preceding section it was stated that in order to secure and maintain a qualified teaching staff, every inducement should be made to keep teachers growing after they enter the profession, since so large a number enter young and inexperienced and with limited training, and remain only a

few years. The means of securing this growth is through the certification law. Certificates should be valid for such lengths of time as to compel teachers who would not otherwise do so to keep improving themselves by study, travel and other agencies. It was said in the section referred to that the average life of teachers in the counties is approximately three years and consequently they should be as well prepared as possible before entering upon their work. The survey staff has the following recommendations to make regarding certification:

Desirable Changes in Certification

The *Elementary Certificate*, which at present is valid for six years, and renewable for another six years, should be made valid for two years and renewable for periods of two years, if during the life of the certificate the holder thereof shall have earned two session hours of credit.

The *Normal Professional Certificate*, which is valid for ten years and renewable for another period of ten years, should be valid for three years and renewable for periods of three years if during the life of the certificate the holder thereof shall have earned two session hours of credit.

The *Collegiate Professional Certificate* should be valid for a period of five years and convertible into a life certificate whenever the holder thereof shall have taught during the life of the certificate successfully for three years.

Since nearly ninety per cent. of teachers are women it is natural to expect that their teaching experience will be brief. Marriage is the destiny of most women, but it is no loss to society when a capable teacher becomes a homemaker. Nevertheless, the fact that the teacher turn-over is very great makes it important that teachers should be well trained before they enter the profession. For economic reasons it seems necessary for the present to permit teachers to begin teaching with only one year of training beyond the high school. Such teachers are young, inexperienced in life, and have inadequate professional preparation. The elementary certificate now issued to these graduates is good for six years, consequently it is practically a life certificate. In other words, the State is inviting these candidates to drop out of school at the end of one year of college work and does not encourage them to continue their preparation after taking up teaching. Those who have done two years of professional college work receive the normal professional certificate which with its renewal is valid for twenty years. Very few teachers are in service beyond that period. Here again the State is inviting teachers to discontinue study.

Careful investigation has convinced the survey staff that its recommendation will not reduce the supply of teachers below the State's necessities. Furthermore, the proposed changes in the validity of certificates will put no hardship upon future teachers, as they will have two full years in which to earn two session hours credit, and this can be done in a summer school. Of course the law would not be retroactive. The result of these changes will be continued growth in academic and professional knowledge on the part of Virginia teachers and a general improvement in teaching throughout the State.

Professional Requirement for all Teachers

A minimum professional requirement should be set up for every variety of certificate granted. At present the State Board issues a collegiate certificate to persons who are college graduates, irrespective of whether they have taken any education courses. The staff believe that this practice should be discontinued and that Virginia should say that no person shall be legally qualified to teach who has not made at least a minimum professional preparation for the work he is undertaking to do. In the judgment of the staff the minimum requirement of professional preparation should be fifteen semester hours

and should include observation and practice teaching. The date at which this requirement should go into effect should be set far enough ahead so that the colleges of the State would have time to make the necessary adjustments.

Cooperation in Teacher Training

The staff believe that it is for the welfare of Virginia that a closer relationship between the teachers colleges and the University should be established, to the end that graduates of the teachers colleges may continue their study in the graduate school of the university. It seems desirable and entirely practicable that at least one course of study should be offered at the teachers colleges which would be recognized as full preparation for graduate work at the university. It may be that the curricula in early elementary education and in special subjects are of such a nature as not to receive full credit at the university for the present as the university is offering little work of a like nature, but the time should soon come when a person upon graduating from a four year course in a Virginia teachers college should be admitted to the graduate school of the university with full credit. The catalogues of the teachers colleges and of the university should carry a definite statement as to what credit may be expected at the university by graduates of the teachers colleges. Such a procedure would eliminate misunderstanding which is now not altogether lacking.

Teachers of Special Subjects

The survey staff recommend that the preparation of teachers of special subjects, such as teachers of commercial branches, physical education, music, home economics, etc., should be so distributed by the Board of Education among the teachers colleges that there shall not be duplication of effort and needless expenditure. As new demands for special teachers and supervisors arise this principle of distribution should be applied.

Continued Education of Teachers in Service

In order to help teachers in service to continue their study and to make it possible for those who must have their certificates renewed to earn the necessary credits, the staff recommend that the teacher training institutions offer extension and correspondence courses. The university and the College of William and Mary are at present offering extension courses and the Teachers College at East Radford is offering correspondence courses. The experience of many institutions in many States for many years has established the educational soundness of extension work. The value to the teacher is unquestioned. It costs much less to earn a credit through extension than upon the campus. If the regular staff rather than a special extension faculty offer the courses due care should be taken that no member of the faculty should become too heavily burdened with extension course work.

There are many ambitious teachers who are so far away from the centers where extension courses can be organized that they cannot avail themselves of extension opportunities, and something should be done to give them equal privileges with those who are able to continue their preparation through extension centers. Correspondence courses is the answer. Education through correspondence is far beyond the experimental stage. Leading institutions like the University of Chicago and the University of Wisconsin have been carrying on such work for years. The relative advantage of study by extension or by correspondence need not be discussed here. It is true, however, that a student who successfully pursues exacting correspondence courses must engage in painstaking and effective study. He has no one to lean upon. His fate is literally in his own hands. The final examination in correspondence courses should be given either on the campus or through

some agency that is entirely reliable. Superintendents of schools and other school officials have been found willing to supervise such examinations.

The staff venture to suggest that if extension and correspondence work is taken up, that representatives of the institutions meet and formulate a program of procedure and set up such standards as will insure full respect both within and without the State for the work done.

Institutional Source of Teacher Supply

Table 44 shows the contribution which the institutions of the State that prepare teachers made in 1924-25. From this table it appears that 3,289 came from State supported institutions, 1,142 from private institutions, and institutions outside the State furnished 769. Two thousand eight hundred and ninety-six have done college work but have not graduated, and consequently are not accredited to institutions.

CHAPTER XLIV

STATE TEACHER TRAINING INSTITUTIONS

Virginia maintains four teachers colleges which are exclusively teacher training institutions. Only white women are admitted. In addition there are departments of education at the University of Virginia, at William and Mary, and courses for special teachers at Virginia Polytechnic Institute. These institutions, with the private colleges, are year by year furnishing more candidates for teaching and properly developed will be able to supply the State's needs for white teachers for an indefinite period.

Teachers Colleges

As might be expected, the teachers' colleges furnish by far the largest number of teachers and their output has been steadily increasing. It is largely due to them that the State has been able to advance its qualifications for teaching.

Table 45 shows the enrollment of the colleges for the year 1917-18, the year of the Inglis Survey, and in 1926-27. It will be observed that in 1917-18 all of the colleges admitted students of high school grade, the total number for the year being four hundred and seventy. That practice has been discontinued and only graduates from standard four-year high schools are admitted. The total enrollment of students of collegiate grade in 1917-18 was 1,035, and last year, 1926-27, it was 2,815. In nine years the number of collegiate rank has increased two hundred and seventy-two per cent. Beyond doubt the attendance and the number of graduates will continue to increase if accommodations are provided, for the number of graduates from high school will increase and of these a proportionate number will desire to teach.

Table 46 gives the number of graduates from the four teachers colleges for the years 1923-24 to 1926-27, inclusive. This table reveals interesting and very significant facts:

1. The number of graduates from the two-year elementary curriculum has steadily increased.
2. The number of graduates from the four-year elementary curriculum has increased, but the total number from the four schools is small.
3. The two-year high school curriculum has passed its usefulness.
4. The number of graduates from the four-year high school course has markedly increased, the total for 1923-24 being fifty-one and for 1926-27 one hundred and sixty-two, an increase of three hundred per cent.

It seems reasonable and safe to draw the following conclusions from these facts:

1. The supply of well prepared teachers will continue to increase.
2. That there is no demand and little encouragement for young women to spend four years in preparation for teaching in the elementary school. The rewards are not commensurate with the cost of preparation in time and money. There are no facts to warrant the expectation that the numbers graduating from the four-year elementary course will increase greatly in the very near future.
3. There is good reason for concluding that year by year more graduates will finish the four-year high school course.

Social and Economic Status of Student Bodies

Table 47 furnishes the interesting information that every county of the State is represented in the student body of the teachers colleges. Naturally, each college draws the larger part of its students from its immediate vicinity, but every section of the State is served.

Table 48 enables us to get a view of the social and industrial background from which teachers are drawn. It will be noted that every social group from unskilled labor to the professional group is represented.

Table 49 gives the economic status of the homes from which students in the teachers colleges come. It will surprise no one who is acquainted with the profession to know that the majority of students come from homes with an income of \$2,000 or less. It is no misfortune that the teachers of this historic State come from the levels of society that know the meaning of industry and thrift and consequently have an insight into the practical social problems that all but a meager fraction of our population have to face. They that have had to struggle to attain are the best guides of those who must struggle to attain.

The Teaching Staff

Table 50 gives the number of teachers in the four teachers colleges of the State for the current year, 1927-28, and their education and training. There are to-day thirty more instructors than there were nine years ago to take care of an increase in enrollment of three hundred and ten.

There has been a notable increase in the academic and professional education of the instructors. Only eleven of the present staff of one hundred and twenty-nine are not college graduates, as against thirty-nine out of ninety-nine in 1918. The number holding doctors degrees has increased from twenty to fifty-five. This is a creditable advance and gives evidence that Virginia is alive to the notable movement which is taking place in the teachers colleges of the country.

It appears from Table 51 that the teachers colleges are fairly well staffed to carry on their present work. The number of classes below five in the four institutions total only eight and the classes that are above thirty-five are almost wholly in physical education, music, and writing, where large classes are permissible.

Table 52 shows the salary schedules at the teachers colleges. Any one acquainted with the salary levels of the country will see at a glance that the scale in the Virginia teachers colleges is far below the standard. One is surprised when he compares the professional training of the teachers college faculties with their salaries. Virginia is fortunate to secure so good a staff of teachers for the salaries she is paying.

Costs and Facilities

Table 53 shows the cost to the State per student at the teachers colleges and Table 54 shows the per capita cost to the student. It is impossible to believe that any State is getting better returns for the money invested in teacher training than is Virginia. The results are a compliment to the administrators both of the State government and of the colleges. But values must be paid for by some one. The low cost to the State is compensated by the low salaries which are paid to teachers and the relatively high cost of education to the students.

A study of Table 55 will reveal the fact that the teachers colleges do not have proper accommodations for their present enrollment. Dormitories are badly overcrowded. Every one of the institutions has turned applicants away. It is clear that if the teachers colleges are to meet the needs of the State for the training of teachers their physical plants must be enlarged soon.

Teacher Training at the University

The Kerr School of Education was established in 1905 with two professorships. The 1927-28 catalog announces a faculty of nineteen. The department is comfortably housed and fairly well staffed. It confines itself chiefly to three types of work:

1. The training of superintendents, principals, and supervisors.
2. The preparation of high school teachers.
3. The offering of graduate courses.

During the summer session, however, the department broadens its work and a great many courses in elementary education are given. There may be some question as to the justification of summer work in elementary education, and

certainly it would be regrettable if the university should expand in the elementary field, for this should be left to the teachers colleges. The scope of the university school of education in the graduate field is already broad and undoubtedly will continue to expand as the needs of the State demand. This phase of educational work should be encouraged for a State that would properly develop its educational system should furnish opportunity for its teachers to continue their study in the graduate school.

In order properly to develop its work in supervision, the school of education should have a practice school entirely under its own control. At present it does its practice teaching in the city system and under such conditions a free hand cannot be expected.

William and Mary

The College of William and Mary is equipped with a well-organized school of education. It offers courses of study for elementary teachers, high-school teachers, superintendents, supervisors, and principals. Under an arrangement with the public schools of Williamsburg and Newport News, practice facilities are provided. William and Mary is making a worthy contribution to teacher training, but cannot expand her usefulness without increased financial aid.

Private and Out-of-State Colleges

Table 44 shows that the private colleges are furnishing a considerable proportion of the teachers of the State. It may be safely assumed that an increasing number of graduates from private colleges will desire to take up teaching. Believing that teaching is a profession and an art, the survey staff recommends that the certification regulations be so amended that the private institutions will be required to provide adequate training in professional subjects, including opportunities for observation and practice.

Table 44 also shows that seven hundred and sixty-nine teachers received their education in institutions outside of Virginia. Undoubtedly Virginia offset this immigration of teachers by an equal or greater number who for various reasons left Virginia to teach in other States.

CHAPTER XLV

SHALL THE TEACHERS COLLEGES PREPARE HIGH-SCHOOL TEACHERS?

This has been a mooted question in American education circles for more than a quarter of a century. Time and the attendant advance in education have answered it in the affirmative in a majority of the States. Educational progress has demanded that high school teachers shall be college graduates but the colleges in most States outside of New England and the Pacific States have not been able to supply the need. Moreover, too many of the colleges have not had the facilities to give the necessary professional training and consequently the normal schools have been called upon to help out the situation. As a matter of fact, the normal schools have always trained high school teachers, and now that the high schools are demanding college graduates, the normal schools have extended their work to meet the new conditions and the change of name from normal school to teachers college is simply in keeping with the advance in standards. The teachers colleges have assumed no new function, they have only kept step with advancing education.

There is a likelihood that with all the colleges of Virginia training high school teachers there will be an over supply, and to guard against this the staff recommend that all students in teachers colleges preparing for high school teaching, except those in special lines like commercial and home economics, shall be required to take enough courses in elementary education to fit them to teach in the intermediate grades. This will guard against an over supply in the high school field and will also insure that a considerable number of college graduates will find their way into the elementary school. The desirability of this is beyond question.

Without doubt many of the young women in the teachers colleges preparing for high school teaching would be equally efficient and happy in grammar grade positions. Should the policy of having candidates for teaching prepare for both high school and grammar grade work be carried out, it would insure that the State would receive returns for the money it has spent in training its teachers. The State cannot afford to educate a teacher and then lose her services. Since the teachers colleges are administering four year curricula for the elementary field, the additional cost to the State to enable them to carry four year curricula would be relatively small, as the third and fourth years of the elementary and high school curricula overlap to a very great degree and students in these years would do a large part of their work together. Moreover, laboratories adequate for a four-year curriculum in elementary education would generally suffice for a high-school curriculum.

The training school demands for the high school curriculum merits consideration. Farmville has a high school for training purposes in operation on its campus. Harrisonburg has completed arrangements with the city system of schools by which the city schools will supply practice opportunities. At Radford a similar arrangement has been entered into with the high school at Bellsprings.

It is understood that an appropriation for a training school at Fredericksburg has been approved by State authorities. It, therefore, appears that the four colleges will have practice school facilities to carry on the work in preparation of high school teachers.

CHAPTER XLVI

THE TRAINING OF RURAL SCHOOL TEACHERS

The rural school problem is conceded to be the most perplexing one in American education, and has been so throughout the whole history of the nation. It is common knowledge that the poorest trained teachers go to the rural schools. There has been much criticism of the teachers colleges because of this fact, and again and again the charge has been hurled at them that they do not train rural school teachers, and the charge is correct. But the fault does not lie with the colleges but rather in the general situation for which the teachers colleges are not responsible. During the last twenty-five years at least, one teachers college after another has undertaken to solve the problem of training rural school teachers. They have established rural school departments, brought the most inspiring leaders to the teaching staff and secured rural schools for training purposes, but so far as supplying the country schools with trained teachers their efforts have been disappointing. The reason is very simple and easy of comprehension: The country schools do not pay the salaries nor offer the living conditions and social opportunities of the sort to attract teachers. Against such adverse conditions the teachers colleges have not been able to make much headway.

The general situation which has been described is applicable to Virginia. The teachers colleges of the State have so far done little directly for rural education but the time has now come when they should vigorously attack the problem. The staff believe that each of the four teachers colleges should have on its faculty a capable leader in rural education and that a concerted attempt should be made for the better preparation of rural school teachers. If this were done the teachers colleges would become centers of light and leading in rural education and in time their influence would tell.

More than this, the curricula of the colleges should be modified in the direction of rural education. Since the State is moving forward toward one year of preparation for the lowest grade of certificate, the teachers colleges will have a chance to really affect rural school teaching, and since the chances are that a very large per cent of those who will finish the primary curriculum will teach in the rural schools, certain rural school subjects should be required in that curriculum. The minimum would be a course in the rural school curriculum of study, a course in rural school organization and management and a course in rural school sociology. It would be very helpful if every one completing this curriculum should have an opportunity to observe, for at least a limited time, the management of a one-room school. It must be squarely faced that the great need for rural school betterment is better salaries. There is little possibility of getting high grade teachers in the rural schools until better salaries are paid. Here again the staff urges the necessity of an equalization fund that shall assist the weaker counties in the support of their schools.

CHAPTER XLVII

CONCLUSIONS AND RECOMMENDATIONS

1. The data given in the preceding pages indicate that Virginia has been making substantial progress in the direction of teacher training and has the stage set for progress in the future. In the first place, she has institutions to train all types of teachers which her public school system needs. Her problem now is to develop these institutions to the extent that they can furnish a sufficient supply of better prepared teachers. The hope of the State Board of Education is that by 1931 the lowest grade of certificate will be issued on the basis of a year of professional training in college. If this hope is realized the teacher training institutions must be expanded to meet the new demands. At present approximately fifty per cent of the teachers have had a year of collegiate professional training and to supply this number the teachers colleges and William and Mary are crowded to their fullest capacity. The situation will be helped by requiring the private colleges to increase their facilities in the direction of practice teaching.
2. The dormitories at the teachers colleges are today crowded beyond their normal capacity. Students are being turned away. More dormitory space must be provided not only to take care of the present enrollment but to provide for the increase which is necessary to meet the new certification regulations.
3. The teachers colleges should take up the problem of the rural schools. Rural school departments should be established and the course of study should be adjusted to meet rural school needs.
4. The report of the inspection of teaching in Virginia schools, which appears in other chapters, indicates that the work is entirely too bookish. Teachers seem to have little resource in handling concrete material. In the primary grades there is very little handwork and nature study. The book seems to dominate the whole school procedure. The teachers colleges should undertake to correct the situation.
5. The faculties of the teachers colleges should be improved in scholarship and in some instances in personality. The presidents of the colleges have done the best they could with the money at their disposal. Virginia will never be able to secure the type of teachers her teachers colleges should have until she pays better salaries. The president of one of the Virginia colleges remarked that he could not get a first rate man, nor even a second rate man with the salary he could offer; he was obliged to take a third rate man or one who was young and relatively untried. The law of supply and demand operates in the teaching field as well as in the field of trade. Good teachers are scarce, as is any good article, and the institutions with money are out after them.
6. If the rural schools are to have good teachers, better salaries must be paid, and to help the poorer districts an equalization fund supplied by the State seems a necessity.
7. The staff believe in the professional training of teachers and recommend that no certificate for teachers be issued except on the basis of professional training. Teachers should keep growing and to that end the staff recommend changes in the certification laws reducing the number of years for which certificates are valid.
8. The staff recommend that the teacher training institutions offer correspondence and extension courses.
9. A definite correlation should be established between the teachers colleges and the university.

10. The present policy of the board of distributing the training of teachers of special subjects—music, home economics, commercial branches—should be continued so that overlapping and needless expenditure of money may be avoided.

11. The university should have an experimental training school wholly under its direction.

12. It has come to the attention of the staff that the authorities of Virginia Polytechnic Institute are debating whether they should prepare teachers of general subjects for high schools. In view of the fact that all the institutions of the State are sorely in need of money, there should be no expansion in any State supported school where the situation does not definitely demand it, and since the supply of high school teachers is at present adequate to the demand and will without question increase faster than will the need, it would be unfortunate if the Virginia Polytechnic Institute should take up the training of high school teachers.

DIVISION VI

Negro Education

CHAPTER XLVIII

THE STATUS OF NEGRO EDUCATION

Negroes constitute nearly one-third of the population of Virginia. Of the 2,309,187 persons in the State, according to the Federal census of 1920, 690,017 or 29.9 per cent were negroes. So large a proportion of the population is not without social and economic significance. Growing industries in cities are making increased use of Negro labor, and for farm labor the Negro is the chief source of supply. Among employers the survey staff discovered a growing recognition of the value of this labor to the State and also something of a desire to develop and improve it through increased education and improved training.

For the Welfare of the State, Negroes Should Have Good Schools

The desire for better educational facilities for their children, together with the opportunity for economic betterment, has led Negroes in rapidly increasing numbers into the cities. Nevertheless, more than two-thirds of them remain in the country in Virginia. Here they own and operate, in round numbers, 30,000 farms containing 1,371,333 acres, and valued at \$57,-004,470.¹ In addition they operate as tenants 16,585 farms comprising 855,-326 acres, valued at \$41,502,119. And as laborers they cultivate thousands of acres more. In addition, these colored people are building up, among themselves mainly, considerable business. And being distinctly separated from the whites socially they have the necessity of developing their own professional groups, especially teachers, preachers, social workers, agricultural and industrial leaders, nurses and physicians. Accordingly, it is of great importance that this large group of the population, bound up as it is with the material prosperity and the social progress of the State, should have the benefit of the most effective schools. No other group within the State are so restricted to themselves as are the colored people, and accordingly no others are so dependent upon the effective, constructive service of their schools as they. However, of the schools provided for Negro youth the survey staff found but few capable of such service. In fact, the survey staff was repeatedly told by school officials and others that when they spoke of education in Virginia only education for whites was indicated. Indeed, they found indifference to Negro education surprisingly characteristic.

The Negro School Population

The State school census² for 1925, the latest available figures, shows a school population, seven to nineteen years of age, as follows: White by counties, 378,874; white in cities, 105,858; total, 484,732. Colored by counties, 170,835; colored in cities, 45,967; total, 216,802. Thus the colored school population is forty-two per cent that of the white school population, or thirty per cent of the total school population. The colored school population bears practically the very same relation (30%) to the total school population of the State as Negroes bear (29.9%) to the total population.

Enrollment, 1925-1926: Of the school population the following were enrolled:

Whites by counties, 305,105; whites in cities, 93,396; total, 398,501.
Colored by counties, 116,015; colored in cities, 36,959; total, 152,974.

Attendance, 1925-1926: Of those enrolled the following were in average attendance daily:

Whites by counties, 236,932; whites in cities, 77,064; total 313,996.
Colored by counties, 81,163; colored in cities, 29,534; total, 110,697.

¹Work, Negro Year Book, 1925-26.

²Annual Report of the Superintendent of Public Instruction, Virginia, 1925-26.

Per cent. of attendance, 1925-1926:

Whites by counties, 86; whites in cities, 91; total, 87.

Colored by counties, 76; colored in cities, 90; total, 80.

The above tables show that eighty-two per cent of the white school population and seventy per cent of the colored school population were enrolled in the schools in 1925-26. Of the school population sixty-four per cent of the white and fifty-one per cent of the colored were in attendance daily. However, for the white pupils enrolled the per cent in average daily attendance was eighty-seven while that of colored pupils was eighty.

Enrollment and Attendance of Negro Pupils.

In comparison with the figures for the enrollment and attendance of white pupils, the figures for colored pupils make a rather poor showing. Nevertheless, they indicate a marked advance over the figures for so recent a year as 1917-18, for instance.¹ They are as follows:

	1917-18	1925-26
Per cent. of school population enrolled	58.8	70
Per cent. of school population attending daily	36.1	51
Per cent. of enrollment attending daily	62.5	80

The accompanying table shows a gain in eight years of 11.2 per cent in enrollment of school population, a gain of 14.9 per cent of the school population in daily attendance, and 17.5 in the per cent of the enrollment attending daily.

These gains are in keeping with the observations of the survey staff. Although they made their visits to the colored schools during the first month of their term in most cases, they found the enrollment practically up to the maximum of last year in many schools. And most of the schools were maintaining a high average attendance. The poor general attendance referred to above is due in large measure to a group of exceptional counties mainly in the tidewater section. Here negroes live in large numbers, and here are provided for them in most cases the poorer school facilities, as the following table will in some measure indicate.

¹Virginia Public Schools Education Commission: Survey and Report, p. 296, 1919.

CHAPTER XLIX

SCHOOL FACILITIES FOR NEGROES

The following counties have a low percentage of attendance and correspondingly poor school facilities for colored children.¹

COUNTIES	Per cent of Attendance	SCHOOL POPULATION		SCHOOLROOMS OPEN		SCHOOL TERM IN DAYS	
		White	Colored	White	Colored	White	Colored
Accomac.....	50	5,682	4,556	177	62	175	120
Appomattox.....	65	2,249	1,146	62	16	171	96
Goochland.....	58	1,856	1,686	39	28	180	140
Isle of Wight.....	57	2,345	2,961	64	34	180	143
Louisa.....	46	3,052	2,699	90	51	155	120
Lunenburg.....	57	2,573	2,193	86	40	169	110
Middlesex.....	62	1,316	1,788	36	24	185	132
Princess Anne.....	57	2,098	2,545	64	26	190	141
Sussex.....	65	1,195	3,018	52	39	180	145
Warwick.....	50	979	682	29	12	180	180

	PER CAPITA COST OF INSTRUCTION IN ELEMENTARY SCHOOLS.		VALUE OF SITES AND BUILDINGS.		VALUE OF FURNITURE AND FIXTURES.	
	White	Colored	White	Colored	White	Colored
Accomac.....	\$22.30	\$4.29	\$700,000	\$20,000	\$23,000	\$2,000
Appomattox.....	17.30	6.80	70,000	16,500	8,000	2,300
Goochland.....	26.83	6.89	50,000	27,000	18,000	5,000
Isle of Wight.....	26.13	5.82	230,000	15,000	30,000	3,000
Louisa.....	19.00	7.00	112,000	10,000	11,000	2,520
Lunenburg.....	24.04	5.25	186,000	20,000	14,000	1,500
Middlesex.....	22.43	6.17	80,000	20,000	7,500	2,500
Princess Anne.....	27.46	5.33	117,000	17,000	13,500	2,000
Sussex.....	33.61	5.24	175,000	40,000	20,000	5,000
Warwick.....	21.11	7.94	100,000	24,000	7,000	2,000

From the above figures it may be seen that of this group of counties, six opened a schoolroom to groups of from seventy-one to ninety-seven of the colored school population, and the other four offered a schoolroom to groups of from fifty-two to sixty of the colored school population. The figures show, too, that the per capita cost of instruction in the elementary schools ranges for colored children from \$4.29 to \$7.94 in contrast with the range of from \$19.00 to \$33.61 for the white elementary schools in the same counties. The cost for instruction is the chief item of expense in the case of colored schools. It is noticeable, however, that the per capita cost of instruction in eight of this group of counties, as in a dozen other counties of the State, falls below the per capita State appropriation, \$6.50, for the education of each Negro child. Accordingly the colored schools in the counties share but little, if at all, in local taxes for school, and, on the other hand, may not receive, as was not infrequently intimated, all the State appropriation that should come to them. From the figures, too, it is readily seen that this group of counties, as is the case with most other counties, has invested but little in buildings and sites for colored schools. The expenditure for buildings and sites per colored pupil in this particular group of counties ranges from \$4.03 to \$16.00 with the exception of one county for which the average is \$34.00. For the white schools in the same counties these expenditures range from \$29.65 to \$146.00. The expenditure for furniture and fixtures for these thousands of colored children is all but negligible.

Such schools could hardly be expected to make much of an appeal to any children. Certainly their low attendance rating is not due entirely to indifference on the part of the colored people. In eight other counties, for instance, in which

¹Annual Report of the Superintendent of Public Instruction, Virginia, 1925-26.

negroes constitute from twenty-five per cent to fifty per cent at least of the population, the per cent of attendance of negro children is fairly comparable to that of the white children. The counties and per cents are as follows:

COUNTIES.	PER CENT OF ATTENDANCE	
	White.	Colored.
Dinwiddie	89	84
Fauquier	88	82
Fluvanna	76	79
Henrico	92	91
Madison	85	88
Powhatan	87	81
Richmond	80	80
York	82	80

It is noticeable in these counties with considerable Negro population, but with ample school facilities, that in two instances the attendance of negroes is better than that of the whites, that in one case it equals the whites, and that in two counties it falls below the whites by only one or two per cent. In eleven other counties, where the negro population is small and the school facilities more nearly like those for white children, and in nine of the twenty-three cities of the State, the colored school attendance equals or surpasses that of the white schools. The cities are given below.¹

CITIES.	PER CENT OF ATTENDANCE	
	White.	Colored.
Alexandria	91	91
Buena Vista	91	95
Danville	82	87
Harrisonburg	92	93
Lynchburg	92	92
Portsmouth	93	93
Richmond	92	92
South Norfolk	89	89
Staunton	93	94

In four of these cities the colored attendance is actually better than that of the whites, and in only two of the twenty-three cities of the State is the advantage in favor of the white schools by as much as four per cent.

It would seem then fairly safe to assume that, wherever reasonably favorable school facilities are provided for colored children, they make good use of them. It should be remembered, too, that the compulsory school law is rarely enforced in the case of colored children. Superintendents complain that they have no money for the enforcement of the law. Furthermore, to enforce it in the case of colored children would in many instances under present conditions serve to increase already intolerable school situations.

Number of Schools, 1925-26

For the colored children 3,602 schoolrooms were open in the school year 1925-26, or one room for every sixty of the Negro school population, and one room for every forty-two colored pupils enrolled in the schools. For the white children there was a schoolroom for every thirty-seven of white school population, and a room for every thirty-one of the white pupils enrolled. The average for the colored children would be unduly high for efficiency even if the colored people were fairly evenly distributed over the State. The great mass of them, however, are in the Tidewater and Southside sections of the State. Here the congestion in the schools is far greater than the above figures indicate. The following table shows the colored school population per school for ten of these counties.

¹Annual Report of Superintendent of Public Instruction, Virginia, 1925-26, pp. 69, 80.

Average Negro School Population Per Schoolroom¹**COUNTIES.**

Charlotte	80
Halifax	78
Isle of Wight	87
Mecklenburg	73
Middlesex	74
Nansemond	83
Norfolk	75
Princess Anne	98
Surry	76
Sussex	77

The per cent of enrollment for colored children is seventy, as is shown above. If, however, only fifty per cent of the colored children of these counties are enrolled, there would be in most cases more children for each schoolroom than there are white children per schoolroom.

School Buildings

There are for the colored children outside the cities 1,868 school buildings. In the cities there are seventy-one buildings for colored children. The nature of these rural school buildings that house three-fourths of the colored children of the State may be easily inferred from their cost. The average estimated value of these buildings and sites is only \$1,329. For the 4,021 rural school buildings for whites the average cost is \$6,147, which provides buildings none too good in many hundreds of cases. As for the schoolhouses for negroes, two-thirds of them—1,200—are one room buildings, only mere shacks in hundreds of cases. The following table will give some idea of the relative number and distribution of these buildings as they came to the notice of the survey staff observer.

COUNTIES	One Room	Two Room	Three or More Rooms	Total Number
Amelia	9	12	1	22
Chesterfield	8	9	4	21
Elizabeth City	4	2	1	7
Halifax	25	31	5	61
King and Queen	19	4	2	25
King William	12	4	3	19
Louisa	39	5	1	45
Pittsylvania	70	19	2	91
	186	86	19	291

Thus sixty-three per cent of the schools of this group are of the one room type, the kind of school generally discredited for inefficiency. These counties are by no means exceptional in the proportion of one room schools provided for colored children. It would be easy to select from the report of Superintendent of Public Instruction for 1925-26, eight other counties with as high or a higher proportion of one room schools for their colored children.

Being one room buildings is not their sole nor their chief defect, however. Most of these buildings fall far short of the simplest of the State requirements for elementary schools. Mainly they are small, old, dilapidated, ugly buildings, improperly and often insufficiently lighted. On a day's drive in a certain county the survey staff observer found, with the exception of the county training school, and one new Rosenwald School, only old worn out, frame buildings, from thirty to forty years old, and usually not more than about sixteen feet by twenty feet in size. Similar conditions to a greater or less extent obtained in most of the other counties visited. The most unsuitable building seen was a log structure about sixteen by twenty with a sloping ceiling not more than seven feet at its

¹Annual Report, Superintendent of Public Instruction, Virginia, 1925-26, p. 100.

greatest height. It was lighted from three sides by three small windows, one to a side and each containing six panes of glass about nine by twelve inches. On entering the room one could barely see some of the children on account of the darkness, and this, too, with the door standing partly open as was usually necessary. Fifty pupils were enrolled in this school.

In addition to the poor public school buildings, halls and churches are still used to some extent for school purposes. One school was actually found housed in the gallery of an abandoned church. From the State Superintendent's report for 1925-26, it seems that there were 2,425 schoolrooms in the public school buildings of the counties. But since there were 2,782 schoolrooms open in the counties, it appears that there might have been as many as three hundred and fifty-seven schoolrooms for colored children in other than public school buildings.

However, some progress is making in the building of Rosenwald schools and of improved State-plan schools for colored youth. Of the Rosenwald buildings there had been erected in the State up to January 1, 1927, as many as two hundred and eighty-three schools, at a cost of \$1,160,072.¹ Of this amount the colored people paid out of their private funds \$299,523, white people paid, from private sources, \$15,973, public school authorities paid \$654,576 and the Julius Rosenwald Fund \$190,000. These Rosenwald schools will accommodate 29,745 pupils, or thirteen per cent only of the colored school population, or eighteen per cent of the colored children enrolled in the schools.

Equipment

As indicated above, the equipment for colored schools, with the exception of the Rosenwald schools and some of the new State-plan schools, amounts to but little. In most of the counties visited the survey staff observer found schools with plain backless benches, crude, home made double desks, and badly abused, discarded desks from white schools. He found also an encouraging number of good, double patent desks and seats; but, owing to the crowded condition of the schools, these double desks had to accommodate three and four pupils each as a rule. And there is a general absence of window shades, maps, charts, globes, supplementary reading material, a sufficient amount of blackboard, and such other aids as are commonly necessary to make school work effective.

Toilet Facilities

Generally, the rural schools have two very poorly constructed, badly kept, privies. However, the whole group of colored teachers of one county, whom the observer happened to meet in an assembly, reported that not a single colored school of the county had more than one privy. Those the observer saw were in such a bad state of repair as to be useless.

Health Work

In all the cities and the majority of the counties visited by the survey staff observer there were held clinics and the schools had nurses. This work has produced excellent results. The nurses are mainly white, and they are reported as doing very effective service. The superintendent of one county boasted that last year his county had no smallpox while an adjoining county with no nurse had a dangerous amount of smallpox. The clinics are very helpful. Cases that are too difficult for the nurse are treated in these clinics. The doctors are trained physicians, and they render these counties valuable services. However, much of the effectiveness of the efforts of the nurses is destroyed by the poor housing conditions. Children are huddled together in the schoolrooms which are barely large enough for half the number of children in attendance. Many of these houses are poorly lighted, for the light comes from too many directions, and many of them are open and must be cold and drafty in the winter season. They are also poorly provided with sanitary privies as mentioned

¹Report, Julius Rosenwald Fund, January 1, 1927.

above. Often these privies are poorly kept, and they rarely have any provision for children to wash their hands after using them.

School Term

The report of the Superintendent of Public Instruction for 1925-26 states, relative to Negro education:—"The length of term in some counties is all too short, though there is not a county in the State with less than a five months term. A few counties provide nine, with seven as an average. The average term for the rural schools is about one hundred and thirty days. In some sections the colored people themselves are giving of their means to extend the terms and erect buildings."

According to the superintendent's report, it seems that there are three counties that give colored schools nine months or more. They are Arlington, Henrico, and Warwick. One-third of the counties give less than the average one hundred and thirty days. However, of the counties visited three had contracted for a six months term this school year, four for a seven months term, two for an eight months term, and one for a nine months term. If they are typical in this matter of improving the terms in colored schools, as they seem to be, it would appear that the State is making real gains in the time it is giving its colored schools. But the seven months term, apparently the one coming to be fairly typical for the Negro schools, falls short by two months of the standard set by the State for elementary schools.

County Training Schools

The outstanding feature in rural education for Negroes in Virginia, as in the other southern States, is the county training school. There are thirty-five of these schools in as many counties in Virginia. They offer not only elementary work but usually from two to four years of high school work as well. They carry also practical vocational courses for both boys and girls, and originally at least, did something toward the training of teachers for the rural schools. For this work they have been enabled to secure teachers and equipment above the average for the rural schools. The idea is to have one strong, central school for colored youth in as many counties as possible. The colored people, and philanthropic persons, have contributed largely towards the erection and maintenance of these schools. However, they become public property. The survey staff observer saw one of the schools erected at a cost of \$10,000, all of which the colored people had to pay except \$100 appropriated by the public school authorities. In a neighboring county the observer saw another county training school erected by the colored people at a cost of \$8,000, toward which the county gave only \$500. In still another county he learned that the school board is requiring the colored people to raise \$500 this year in order to add a high school grade to the work of the school. However, these are the only public schools that offer any high school training to rural colored youth in Virginia. One of this group of schools has become a fully accredited, four-year, high school.

The school property usually consists of five acres of land at least, a class room building, a shop for vocational work, and in some cases a dormitory. Altogether these schools make the following showing:

County Training Schools.¹

Number of county training schools	35
Acres of land	176
Number of teachers	226
Term (months)	8
Total enrollment	7,701
Enrollment in high school grades	1,249

¹Study for General Education Board: Jackson Davis, 1927.

Value of land	\$ 43,850 00
Value of buildings	397,045 00
Value of equipment	21,000 00
	—————
Total value of property	\$502,395 00
Receipts for buildings and equipment.....	\$ 20,773 48
Receipts for salaries	134,118 23
	—————
Total receipts	\$154,891 71

With sufficient public support and proper direction these county training schools may be so developed that they may serve not only to set worthy ideals for the elementary schools of the counties, but also to bridge the neglected gap between the elementary schools and the teacher training colleges of the State. The colored people stand firmly back of them, and they seem to have won the approval of the local public school authorities. Accordingly, it should not be unusually difficult to secure for them the means to make of them thoroughly efficient, standard schools. They are especially in need of ampler equipment for their science and vocational work, and they should have more and better trained teachers both for their elementary and high school work.

City Schools

Considerable progress has been made in recent years in the city schools for colored youth. Most of the larger cities, at least, have added new modern buildings with improved equipment, and their Negro schools share equally with the white the standard school terms provided.

They still fall short, however, of providing sufficient accommodations for the colored children, and double sessions are quite common. And the maximum salaries paid colored teachers, in either elementary or high schools, rarely equal the minimum salaries paid white teachers for the same grades of work. Nevertheless, the basis of certification is the same for both.

High Schools

Until quite recent years public high school facilities for colored youth were practically negligible in Virginia. Eight years ago there were but three public accredited, four year high schools open to them. The official high school report for 1925-26 shows eight such schools and one accredited junior high school, as follows:¹

Accredited Public Four-Year High Schools

Booker T. Washington High School.....Norfolk, Virginia.		
Dunbar High School.....Lynchburg, Virginia.		
Harrison High School.....Roanoke, Virginia.		
Huntington High School.....Newport News, Virginia.		
Norcum High School.....Portsmouth, Virginia.		
Peabody High School.....Petersburg, Virginia.		
Virginia Normal and Industrial Institute (H. S. department).....Petersburg, Virginia.		
Virginia Randolph Training School...Glen Allen, Virginia.		

Accredited Public Junior High School

Effinger Junior High School.....Harrisonburg, Virginia.		
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There are in addition eleven accredited private high schools for colored people. However, these twenty public and private high schools together

¹Annual Report, Public High Schools of Virginia, 1925-26, p. 25.

make but a handful in comparison with nearly four hundred high schools for whites. In the public Negro high schools there were enrolled in 1925-26, 5,729 students as against 53,093 in the white public high schools of the State. It is noticeable, too, that all but one of the accredited four year high schools are in the cities. This leaves the great mass of the colored people almost entirely without standard high school facilities. And it makes effective training for leadership, so sadly needed by this isolated group, both difficult and unduly expensive. For they must send their children away to boarding schools for advanced elementary and high-school training, which they should receive free of cost at their homes. And this lack of standard high schools in the rural districts also makes it difficult for the State to secure in sufficient numbers properly trained teachers for the elementary colored schools. In commenting on this difficult situation, the Superintendent of Public Instruction says, with truth: "The problem of teacher training for colored teachers lies not so much in the teacher training institutions as in the high schools; the chief difficulty being to find enough properly prepared entrants for the higher institutions."

Vocational Training

In the State course of study space is given to courses in agriculture and industrial arts for the rural schools. In so far as the rural colored schools are concerned, the public makes practically no provision for such instruction. However, about sixty Jeanes industrial teachers are employed in nearly as many counties with considerable Negro population. These trained teachers, paid in part by the Jeanes Fund and in part by their counties, devote themselves mainly to teaching in the colored schools simple, practical industrial work, such as cooking, sewing, simple woodwork, work with reeds and raffia, and simple agriculture. Good samples of this work were found in the schools; and the survey staff observer examined a fine exhibit of this work at one of the county fairs.

Emphasis is placed upon home economics and vocational agriculture in the county training schools. In a number of these schools specially trained teachers and kitchens and shops are provided for this work. However, it is disappointing to find a number of these kitchens and shops inadequately provided with even the minimum equipment needed for effective work. And the same is true of a number of the industrial departments in the city schools.

As to the amount of work of this kind, a recent careful sociological study of rural Virginia reports as follows:¹

"When we examine into the situation here we find much fine work is being done through the 4-H Clubs and the agricultural high schools in direct preparation for country life. Yet, though these forms of activity have been in operation practically ten years, less than 6,000 of the 149,642 rural boys and girls between the ages of fifteen and eighteen were enrolled in the vocational classes in 1925-26. . . . In other words only a very small percentage of the communities of the State as yet have the benefits of such work available. We find also that only 12,665 white rural boys and girls of approximately 224,000 between the ages of ten and eighteen, and 2,552 Negroes of approximately 110,000 of the same ages belong to the 4-H Boys and Girls Clubs."

¹Rural Organizations in Relation to Rural Life in Virginia, Garnett, p. 47.

CHAPTER L

THE TEACHER SITUATION IN NEGRO SCHOOLS

In the colored schools of Virginia, as elsewhere, the teachers are the most effective force. Other agencies in the work of the schools, as has been shown above, have been woefully inadequate. The teachers are mainly responsible for whatever good is accomplished. In view of the conditions under which they have worked, they have rendered a large and important service. In the earlier years, most of the better trained colored people went into school work. This secured for the colored schools an excellence of personnel and a grade of efficiency from which the schools benefited largely. Though better and wider opportunities for economic betterment have taken many teachers of this class from the schoolroom, still many of the older and more efficient teachers remain. And a number of the younger teachers now coming into service bring an amount and a quality of training such as but few of the older teachers acquired. The devotion of these teachers to their calling and the nature of their service are of a high order. Nevertheless, there is an appalling amount of poor, inconsequential teaching in the colored schools, if what the survey staff observer saw in a fairly wide range of city and country schools is typical. In the circumstances, however, it could hardly be otherwise.

The Supply of Teachers

For the colored schools in 1925-26, there were 3,794 teachers. Of these nine hundred and ninety-one were in the city schools. For the county elementary schools, the typical group of Negro schools, there were 2,731 teachers, or an average of one teacher to every sixty-two of the colored school population, or one to every forty-two of the colored children actually enrolled in the schools. These State averages, however, are not typical of conditions in the counties where the great masses of the colored people live. Ten of the counties cited above show the following.¹

COUNTIES.	Colored School Population Per Schoolroom.	Average Enrollment Per Colored Teacher.
Charlotte	80	50
Halifax	78	46
Isle of Wight.....	87	55
Mecklenburg	73	43
Middlesex	74	41
Nansemond	83	53
Norfolk	75	50
Princess Anne	98	58
Surry	76	54
Sussex	77	66

On the basis of a teacher for every schoolroom, it is readily seen that both the school population per teacher and the enrollment per teacher greatly exceed the State averages. With such averages it is not difficult to imagine the impossible situation in many individual schools. The indifference of the public and even of school officials to such conditions is one of the most disheartening features of the whole colored school situation. One of the abler and more progressive county superintendents called attention to the fact that his colored teachers were harder worked and received far less pay than his white teachers and deplored his inability to secure from his school board any better conditions for these teachers. Every one of the rural superintendents consulted by the

¹Annual Report of Superintendent of Public Instruction, Virginia, 1925-26, pp. 69, 76, 86.

survey staff observer recognized the weakness and inefficiency of his colored schools, but all declared it impossible for them to induce their school boards to make the necessary appropriations for the proper support of these schools.

Qualifications of Teachers

Judging from the limited provisions for Negro education already indicated, it is easy to infer that the rank and file of colored teachers could hardly have received adequate training for their work. However, they are meeting in an appreciable degree the advanced requirements for teachers now being made by the State. The annual report of the Superintendent of Public Instruction for 1926-27 will carry the following schedule of certification for teachers of the State:

Certificates Held by Virginia Teachers, 1926-27

COUNTIES

GRADE OF CERTIFICATE	WHITE			NEGRO		
	Male	Female	Total	Male	Female	Total
Collegiate Professional.....	182	222	404	4	1	5
Collegiate.....	338	365	703	8	6	14
Normal Professional.....	18	1,481	1,499	21	152	173
Special.....	295	855	1,150	39	19	58
Elementary.....	46	2,622	2,668	66	544	620
First Grade.....	269	2,547	2,816	117	961	1,078
Provisional First.....	36	544	580	14	142	156
Second.....	3	34	37	8	134	142
Trade.....	1	1	2			
Local Permit.....	16	70	86	67	364	431
	1,204	8,741	9,945	344	2,333	2,677

CITIES

Collegiate Professional.....	82	224	326	12	21	33
Collegiate.....	115	295	410	29	31	60
Normal Professional.....	5	1,096	1,101	8	300	308
Special.....	73	429	502	35	49	84
Elementary.....	3	433	436	11	309	320
First Grade.....	1	114	115	2	84	86
Provisional First.....						
Second.....				2	2	2
Trade.....				1	1	2
Local Permit.....				1	1	1
	279	2,611	2,890	96	797	896

ENTIRE STATE

	White	Negro	Total
Collegiate Professional.....	730	38	768
Collegiate.....	1,113	74	1,187
Normal Professional.....	2,600	481	3,081
Special.....	1,652	142	1,794
Elementary.....	3,104	940	4,044
First Grade.....	2,931	1,164	4,095
Provisional First.....	580	156	736
Second.....	37	144	181
Trade.....	2	1	3
Local Permit.....	86	432	518
	12,835	3,572	16,407

According to this schedule, 2,677 of the colored teachers outside of cities hold some sort of license to teach. Of this number four hundred and thirty-one,

or 15 per cent, have no regular certificate but teach on local permits which may be granted, "whenever the number of licensed teachers is insufficient to meet the demands of any school division," to persons who "have had, at least, the equivalent of two years of high school work." Of the remainder, 1,376, or 51 per cent, have had only the training of the county training schools, or of high schools. Nearly one-fourth, six hundred and twenty, hold the Elementary Certificate which indicates they have had one year of resident work above the high school in a standard teacher training institution. Only one hundred and seventy-three, or 6 per cent, of these teachers hold the normal professional certificate which requires two years of study in a standard normal school or teachers college after completing the high school course. Nineteen have the College or Collegiate Professional Certificates. Including the holders of fifty-eight Special Certificates for the teaching of particular subjects, there were eight hundred and seventy colored teachers in 1926-27, or 32 per cent, of the group who had one or more years of college or normal school education. The latter is a decided gain over eight years ago, when only 20 per cent were reported as having had college or normal school education.

Of the three hundred and thirty-six certificates inquired into by the survey staff observer, one hundred and forty-two, or 42 per cent, represented only high school training or less; one hundred and ten, or 32 per cent, were Elementary Certificates, the minimum standard towards which the State is working for elementary school teachers; and fifty one, or 12 per cent, were of the Normal Professional grade. Two teachers were found working on local permits, but a number of others were reported as having no better certification; and two teachers were seen who actually held at that time no license of any kind. The latter is indicative of the abuses possible under the local permit system.

In both the elementary and high schools of the cities, standard certificates for teaching the several grades of work are demanded, and the colored teachers generally meet the requirements. Of the 895 city teachers 86, or 9 per cent, hold First Grade Certificates; 320, or 35 per cent, hold Elementary Certificates; 84, or 34 per cent, hold Normal Professional Certificates, and 93, or 10 per cent, have either the Collegiate or the Collegiate Professional Certificate.

Teacher Training Institutions: For the training of colored teachers Virginia makes but small provision. The serious lack of high schools has already been indicated. For the direct training of nearly 4,000 colored teachers employed in the State, there is but one teacher training institution supported at public expense, The Virginia Normal and Industrial Institute at Petersburg. This is an excellent institution doing a large and important work. Though it is crowded to the doors with its enrollment of 792 students, it cannot supply the State's need of properly trained colored teachers. More than half of the students enrolled are in the high school department. From the college group proper and from the summer school it is not possible to turn out more than from 150 to 200 normal school and college graduates a year. At least three or four times as many new teachers are needed for replacements each year, not to mention any additions to the teaching force that may be required.

Virginia is fortunate in having a group of deservedly well-known private, colored educational institutions. Such schools as St. Paul's Normal and Industrial School, Hampton Institute, and Virginia Union University help materially, but by no means adequately, in supplying colored teachers. This does not relieve the State of its responsibility for providing properly trained teachers for its schools.

Salaries of Teachers

The pay of Negro teachers seems to range from about one-third to about one-half that of white teachers. In the counties, the average annual salaries for colored teachers are given as \$340. The average in thirty-three of the one hundred counties, however, is below \$300. These averages run from \$160 to \$290 a year. A dozen of the counties show the following:¹

¹Annual Report, Superintendent of Public Instruction, Virginia, 1925-26, p. 90.

COUNTIES	Average Annual Salaries of Colored Elementary Teachers
Grayson	\$160
Madison	180
Louisa	200
Pittsylvania	210
Orange	211
Patrick	213
Lunenburg	215
Essex	222
Appomattox	222
Powhatan	246
Caroline	248
Buckingham	249

As many as forty-three counties of the State pay Negro teachers on an average less than one-half the salaries paid white teachers for the same grade of work. It is significant of the general tendency to underpay colored teachers that many counties outside the sections where Negroes are numerous are among those paying the smaller salaries. In Richmond, white school nurses who serve Negro children receive more than twice the salaries paid colored teachers of the same children. Many of the common occupations open to colored people pay better than school-teaching, not to mention a number of attractive positions in business, social service, and in the professions, rapidly opening to educated colored people. The extremely low salaries paid colored teachers work a special hardship upon them. Their education and training are expensive, for as has been pointed out above, they are usually acquired at considerable disadvantage. Teachers occupy a relatively high position among colored people and are under the necessity of appearing well or lose their position and influence. They are required, also, to attend summer schools and otherwise keep themselves abreast of the times. For these purposes the salaries they receive are woefully inadequate. Furthermore, if they meet the requirements set by the State for certification, and if they render acceptable service, as many of them do, they should, in all fairness, receive salaries approaching those at least paid teachers for similar services the country over.

Outside the cities there is but little inducement for colored teachers to secure proper training. Little regard is given to holders of advanced certificates. There are no legal minimum salary requirements. In one of the counties visited by the staff observer, every colored teacher received \$40 a month for a term of seven months, regardless of the nature of the certificate held. Most of these counties appear to center upon \$40 per month as the standard salary for colored teachers. Some, however, pay certain teachers as low as \$25 per month, and certain others from \$60 to \$75 per month. The effect of the low salaries generally is to fill the rural schools with local, poorly trained, married women having home responsibilities, and with preachers without training for their work, the only persons who find it possible to eke out a living upon the salaries paid. Meanwhile the schools suffer, and children grow up in ignorance. Indeed, such counties as Greenville, Fauquier, Halifax and Pittsylvania report as many as four hundred and thirty eight, five hundred and thirteen, six hundred and twelve and one thousand and thirty-five children, respectively, between the ages of ten and twenty years of age who are unable to read or write.

Supervision of Negro Teachers: In cities, colored schools receive a fair amount of supervision from both superintendent and special supervisors, but in rural schools little attention is given to supervision. However, most of the counties with a considerable Negro population have the services of the Jeanes industrial supervisors who have rendered a remarkable service in arousing interest in Negro schools, in the building of Rosenwald schools, and in improving school houses generally; in doing health work, and in directing the vocational work in the rural schools. These conscientious hard-worked women have not had the time and they have but rarely had the ability to direct effectively the regular classroom work of the schools. But the time has come when superintendents should turn the efforts of this splendid group of workers more definitely in the direction of supervision of classroom work without, however, abandoning the best features of their old work. Already certain of the superintendents are putting such work into effect. Many of the Jeanes supervisors, though, will need special training for this service. New supervisors coming into the service should

have the qualifications for carrying on effectively both the old and the new phases of supervisory work. The large number of poorly trained teachers in the rural districts makes the need of the classroom supervisor imperative, if the literary work of the schools is to be improved, as it greatly needs to be.

With the colored schools handicapped as they are in the country districts, by short terms, poor physical equipment, weak teachers in too many cases, and by a lack of effective supervision of the instruction in the common branches, it is not possible for them to do standard work. As a result, colored children are held in the schools until they grow too old to be interested in the work of the elementary grades, and drop out of school without getting practically any of the benefits the school should give, and so nearly everything the schools have feebly attempted to do is lost.

It would be real economy to put this whole group of schools upon a thoroughly good basis and give them a chance to make a worth-while contribution to the education of the colored people and to the State. Negro education should be placed upon a sound business and professional basis and should be removed as far as possible from the realm of sentiment and indifference. The education of its Negro youth for the most effective living in the community is a business which the State may not neglect without injury to itself. It should certainly hesitate to turn loose upon itself or upon neighboring States a mass of its neglected or ill-trained citizens. With the start already made a great deal can be done without great cost to individual communities. It would not cost much to take a positive rather than a negative or indifferent attitude toward Negro education. After taking this important step the rest would not be difficult. Every community that builds for Negroes a good schoolhouse is proud of itself afterwards for having done it. It is money well invested, for it yields paying returns in satisfaction and better feeling between the races, and in physical comfort and health for the whole community. And more attention to colored schools on the part of school authorities and social organizations generally need not cost much. Yet it is just such attention as the colored schools stand mostly in need of. Better salaries would require more money, but the communities would not lose by paying them, for practically all this money would flow right back into the community again. The whole thing is largely a matter of attitude. How can any one doubt what attitude Virginia, with a little positive constructive thinking in respect to this matter, will take?

Recommendations

1. That for the sake of comfort, sanitation, and health, new, larger, and properly constructed schoolhouses be erected for colored children in the rural districts as rapidly as possible.
2. That in the interest of economy and efficiency, increased efforts be made at consolidating rural colored schools.
3. That improved equipment in sufficient amounts and the commonly necessary school appliances be required for the rural colored schools.
4. That compulsory school attendance laws be made applicable to colored children in both rural and urban schools.
5. That school terms of at least seven months be made a legal requirement.
6. That greater efforts be made to secure properly trained, efficient teachers for the rural and small town colored schools.
7. That such salaries be paid colored teachers as will retain the abler teachers in the service and attract to it the more capable and better prepared new teachers.
8. That the elementary work of the county training schools be so strengthened and improved that it may serve as an attractive model to the other rural schools.
9. That county training schools be given the necessary equipment and teaching force to do standard high school work and to make their science and vocational work effective.
10. That increased and improved supervision be given the rural schools especially.
11. That high schools for colored youth be increased in number in order to supply more entrants for the teacher training and other colleges of the State.
12. That increased facilities for the training of colored teachers be provided, and to this end, that accommodations be largely increased at the Virginia Normal and Industrial Institute.

DIVISION VII

Educational Administration and Supervision

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CHAPTER LI

THE STATE BOARD OF EDUCATION

At the head of the educational system of Virginia is a State Board of Education whose method of selection, term of office, powers and duties are fixed by the State Constitution. The State Board of Education is of the *ex officio*—professional—type and is composed of (a) the Governor, the Attorney General and the State Superintendent, *ex officio*; (b) three educators elected by the Senate from a list of eligibles, consisting of one from each of the faculties and nominated by the respective board of visitors or trustees of the University of Virginia, the V. M. I., V. P. I., the State Teachers' Colleges, the School for the Deaf and Blind, and the College of William and Mary; and (c) two division superintendents, one county and one city, selected by the above mentioned six members.

The term of office is four years, except for the division superintendents whose term on the State Board of Education is two years. The Governor, State Superintendent, and Attorney General take office in January, the division superintendents in April, and the representatives of the higher institutions in July.

Duties of the State Board of Education

The Constitution enumerates the following powers and duties of the State Board of Education:

1. To divide the State into appropriate school divisions.
2. To appoint a superintendent of schools for each school division, prescribe his duties, and remove him for cause.
3. To manage and invest the school fund as regulated by law.
4. To make all needful rules and regulations for the management of schools which, when published and distributed, have the force of law, subject to action of the General Assembly.
5. To select textbooks and educational appliances.
6. To appoint a board of directors to manage the State Library.
7. To prescribe the duties of the State Superintendent of Public Instruction.
8. To provide for the examination of teachers; appoint inspectors; fix compensation.
9. To apportion school funds; determine expenses of State Department of Education.
10. To keep certificates of West Virginia's share of debt.
11. To act as custodian for donations to public free schools.
12. To make regulations for distribution of loans from the Literary Fund.
13. To fix fines for neglect of duty by division superintendent; appoint board of directors of State Library.
14. To guard against multiplication of schools.
15. To approve plans for summer schools; audit accounts.
16. To decide appeals; order the sense of voters taken.
17. To make regulations for children attending school in adjoining districts.
18. To provide encouragement and maintenance of vocational education.
19. To make report to General Assembly.
20. To fix standards for high schools.
21. To supervise Virginia Normal and Industrial Institute Board.

The superintendent of public instruction is a constitutional officer elected by the voters of the State for a term of four years at the same time as the election of the Governor occurs.

Powers and Duties of the State Superintendent

The Superintendent of Public Instruction is *ex-officio* a member of and president of the State Board of Education. His duties are prescribed by this Board and his compensation is fixed by law.

The State Department of Education

The divisions and staff of the State Department of Education are as follows:

1. The Superintendent of Public Instruction.
2. Secretary of the State Board of Education.
3. Auditor-Statistician.
4. Assistant Auditor-Statistician.
5. Supervisor of High Schools.
6. Supervisor of Rural Schools.
7. Supervisor of Negro Education.
8. Supervisor of Agricultural Schools.
9. Supervisor of Trades and Industrial Education.
10. Assistant, Trade and Industrial Education.
11. Supervisor of Home Economics.
12. Supervisor of Teacher Training.
13. Supervisor of Physical Education.
14. Supervisor of Research.
15. Supervisor of School Buildings.
16. Special Agent for School Buildings.
17. Assistant, School Buildings.
18. Assistant, School Buildings.
19. Assistant, School Buildings.
20. Supervisor of Textbooks and Libraries.

Thirteen stenographical secretaries and a shipping clerk.

How the State Department of Education Functions¹

At the present time the State Department of Education is made up of eleven divisions with the following functions:

1. *Division of High Schools.* This division is concerned largely with the development of those high schools already existing, and in conjunction with the Division of Surveys it is attempting to bring about a consolidation and redistribution of high schools over counties in such fashion that the smallest possible number of high schools may be operated to meet the needs of the situation. In addition to this work the one high school supervisor attempts to assess the work of the present four year high schools in order to determine the quality of instruction, the thoroughness with which the course of study is followed, and the capacity of the school to meet the needs of its pupils.
2. *Division of Rural Schools.* As is indicated above one supervisor has charge of the work of development of rural schools. This supervisor works through the rural supervisors and the division superintendents, concerning himself primarily with the establishment of as many "standard" rural schools as it is possible to secure. The supervisor attempts to assess (1) the quality of teaching through observation of the teacher, and by judging her educational qualifications; (2) to induce communities to reach certain standards relating to adequately trained teachers, clean and sanitary school buildings, and instructional equipment. This work of standardizing rural schools has progressed satisfactorily with the limited amount of state supervision possible. The Superintendent of Public Instruction's report for the year 1925-26 indicates 238 accredited one room schools, 243 accredited two room schools, and 303 accredited three or more room schools, with a total enrollment in all standardized schools of 60,227. This same report indicates that the number of elementary school buildings for whites is 4,021, for Negroes 1,868, with a total of 5,889 buildings. It is obvious, of course, that with so limited a staff devoting attention to the rural schools of the Commonwealth, relatively slow progress can be made.

¹Annual Report of Superintendent of Public Instruction, 1925-26, p. 102.

3. *Division of Negro Schools.* Most of the work of this division is concerned with the establishment of standard elementary schools, and the development of high school work at certain centers now called training schools. The supervisor attempts to see that the basic course of study is followed, and that at the same time appropriate shop and farm work is carried on in connection with the school. In conjunction with the Division of Teacher Training, the Supervisor of Negro Schools concerns himself with the important question of teacher preparation. The adequacy of the work with Negro schools is discussed at great length elsewhere in this report.
4. *Division of Physical Education.* By statutory enactment in 1920 physical training and health instruction were provided for the children in the public schools of Virginia. Boards of supervisors of the various counties and other governing bodies of the towns and cities were authorized to make appropriations to provide for health examinations, employment of school nurse, physician, physical directors, etc. By further provision one-half of the annual salary of each physical director may be paid by the State Board of Education. Attempts were made by the State Board of Education to encourage the appointment of county supervisors of physical education. All of the cities availed themselves of this arrangement, but owing to inadequate funds only one or two counties provided for physical directors. A change has been made in the method of supervision of this work. The State is now divided into eleven districts with a general supervisor of physical education in charge of each district. At the present time the State Supervisor of Physical Education is in charge of the district in which the city of Richmond is located. These men work directly through the State Supervisor of Physical Education with their main objective the development of physical education and health work.
5. *Division of Agricultural Schools.* This division establishes agricultural schools under the Virginia plan for vocational education adopted in accordance with the Federal law and executed in co-operation with the Federal Board. The Virginia plan itself, following the outline of the Federal Board, sets up in rather specific fashion the course of study, laboratory work, and the project work to be carried out. By quarterly and monthly reports from the field, by almost constant visitation, and with the help of two assistant general supervisors, the Division of Agricultural Schools keeps in intimate touch with the actual work at each agricultural center. It may be said for the agricultural schools, as indeed for the other type of vocational training, that under the requirement of the Federal Board the supervision of schools of this type is more careful and more thorough than is possible in other types of education because of the larger supervisory force available.
6. *Division of Trades and Industry.* The chief work of this department for the last year or two has been the encouragement of setting up trade and industrial classes in cities and small town centers. The division concerns itself with appropriate teacher placement, with frequent conferences, and with general supervision. For the year ending July 1, 1927, a large number of projects were put on by this division and were very carefully followed out.
7. *Division of Home Economics.* Home economics work is carried on in conjunction with the Federal Board as part of the program for vocational education. This division concerns itself with teacher preparation carried on at Harrisonburg and William and Mary College, with the recommendation of teachers to local school boards, and with visitation and supervision.

8. *Division of Teacher Training.* The chief aim of this division is to encourage better trained teachers for all types of schools in the Commonwealth. This division likewise has operated a teacher placement bureau which for the year ending July 1, 1927, was placed in another division of this department. The division does all work relating to the issuing of teachers' certificates, having in this connection to assess training courses and qualifications, to secure data from college registrars and teacher training institutions, and to issue certificates accordingly.
9. *Division of Research.* This division was set up in January, 1927. The purpose and objective of the division is to make special studies, surveys in relation particularly to the establishment of high school centers. So many calls for county surveys have come in since the establishment of the division that its time has been quite fully occupied in carrying on such surveys with a view to determining the most effective number and the location of high schools within the counties.
10. *Division of Textbooks and Libraries.* The chief objective of this division is to look after the proper distribution of school textbooks and to encourage the establishment of small school libraries. The supervisor scrutinizes requisitions for books and book orders, checks over local accounts, examines local stocks of books, and where transfers of agencies are made, sees to the proper transfer. In addition, the division sets up library lists and sends out order blanks so that such library books may be purchased directly from the publishers.
11. *Division of School Buildings.* The purpose of this division is to furnish plans and specifications and supervision of construction for school buildings in rural and small town sections. This division does not undertake to operate in cities and in towns except on request. The division concerns itself, of course, first of all, with school buildings and their immediate equipment. In a secondary fashion it has, in cooperation with the State Purchasing Agent, undertaken to secure standard school supplies at a very much less sum than usually paid for these supplies. The origin of this division lay in the conception that if a certain building type was found satisfactory for one county, the same general type ought to serve another county as well. While the division does not attempt to set up the same standard building everywhere, certain standard features appear in practically all buildings whose plans and specifications have been furnished by this division. Supervision of school building construction is also furnished by this division.

School Trustee Electoral Board

In each county there is a board known as the School Trustee Electoral Board composed of three resident qualified voters appointed by the judge of the circuit court for a period of four years. This board has two specific duties:

1. To appoint one trustee from each magisterial district to act as a member of the county school board.
2. To determine appeals from decisions made by the county school board.

The County School Board

This board is composed of one trustee from each magisterial district in the county, appointed by the School Trustee Electoral Board. This board was created by an act of the General Assembly in 1922 for the purpose of establishing the county unit of administration. The former county board and all district boards were abolished by the act creating this board. Exception was made in the case of cities and towns now constituting, or which may hereafter be constituted, separate school divisions.

Powers and Duties of County School Board

The following powers and duties were vested in and charged upon the county school board:

1. All powers and duties vested in or imposed upon the several district boards abolished by this act.
2. All county school funds and properties are vested in this board and shall be managed by them.
3. To act as custodians of gifts for school purposes.
4. To sell or exchange school property by permission of the judge of the circuit court.
5. To prepare with advice of division superintendent, an annual budget.
6. To request board of supervisors to fix the county school levy.
7. To render annually a financial report.
8. To settle financial accounts with the county treasurer.
9. To institute legal proceedings to compel settlement of accounts.
10. To render an annual report to the Superintendent of Public Instruction.
11. To secure by visitation, or otherwise, information about the schools under its jurisdiction; to provide pay for teachers; to provide adequate school facilities, equipment, etc.; to see that school repairs are made; to order payment of legal claims against the board.
12. To enforce school laws; make and enforce regulations for conduct of schools; to enforce State Board regulations; to employ and assign teachers upon recommendation of the division superintendent; to enforce teacher certification regulations of the State Board of Education.
13. It may appoint local school committees to act as an advisory board concerning matters pertaining to the local school.
14. To approve agents recommended by the division superintendent to take school census; to provide for consolidation and transportation where conditions warrant it.
15. To initiate action for the condemnation of property for school purposes.
16. It may establish full time, part time, and evening classes in industrial education, agriculture, household arts, and commercial training.
17. To provide for the taking of school census; to furnish free textbooks to the indigent; to suspend or expel pupils; to require pupils to provide textbooks.
18. To disburse funds for textbooks and to order such books where the free textbook system has been legally authorized for the county.
19. To provide flags for school houses.
20. To borrow money on short time loans by and with the consent of the tax levying body.
21. To encourage teachers meetings.
22. To select plans for school buildings.
23. To contract with teachers and guard against violation of contracts.
24. To fix the length of the school day session.
25. To visit schools in their jurisdiction.
26. To employ physical education supervisors in their discretion.

The City School Board

In all cities of the first and second class and in certain towns of more than 500 inhabitants, there is a school board with powers and duties over the city or town schools, similar to those granted to county school boards for the government of county schools.

Manner of Election. The school board of the city is made up of three trustees from each school district in the city, appointed by the council of the city for a period of three years.

Duties:

1. To submit to the council an annual budget.
2. To establish and maintain a system of free public schools.
3. To make rules and regulations for the government of the schools.
4. To determine methods of teaching, government, and studies to be pursued.
5. To determine length of the school year.
6. To employ teachers who are legally certificated upon recommendation of division superintendent.
7. To suspend or expel students.
8. To provide free textbooks to indigent children.
9. To establish high schools and normal schools.
10. To see that census is taken.
11. To provide suitable schoolhouses, equipment, etc.
12. To manage and control school funds.
13. To examine and pay legal claims against school board.
14. To report annually to council a statement of financial accounting.
15. To initiate condemnation of lands for school purposes.

The Division Superintendent of Schools

The Constitution provides (section 132) that the State Board of Education shall, subject to the confirmation of the Senate, appoint for each school division a superintendent of schools who shall hold office for four years. His duties are to be prescribed by the State board of Education.

Educational Qualifications. The General Assembly has set certain minimum qualifications for eligibility to this office. These qualifications have been raised by the State Board of Education, which now requires the applicants to meet the following qualifications:

Minimum Requirements for Appointment. The following minimum requirements for the position of division superintendent of schools have been prescribed by the State Board of Education, the applicant being required to meet the qualifications set forth in paragraphs 1 or 2, and in paragraphs 3 and 4:

1. Graduate of the four year course of a standard college with at least the degree of B. S. or A. B.; or,
2. The successful completion of a two year course in a standard college with at least five years of experience as teacher or school supervisor. (The college courses or the practical experience as prescribed above shall have been completed within the ten years immediately preceding the date of application.)
3. Professional training in educational method and school organization equal to 15 per cent of the four year college course or its equivalent, the equivalent being regarded as not less than five years of practical experience in school supervisory work.
4. General administrative ability as evidenced by practical experience in business or in the administration of the business side of educational or related work, covering at least two years, shall be regarded as the necessary minimum; provided, however, that graduates of a standard four year college course who have completed the required work in school administration may be excepted.

Duties of Division Superintendents:

1. Grant appeals from action of county school board, and attempt to adjust them.
2. Approve site, location, plans, and specifications of school buildings.
3. Condemn school buildings for adequate cause and abate nuisances.
4. Approve teachers' certificates.
5. Report delinquent officers and require statement of treasurers for failure to pay school warrants; require report from county treasurer each three months.
6. Nominate students to William and Mary College.

7. Make reports and file statements to State Board of Education.
8. Report boundaries of districts to service corporations.
9. Issue child labor employment certificates.
10. Inspect accounts of clerk of school board.
11. Distribute report blanks from State Board of Education to teachers.
12. Enforce regulations of State Board and compliance with decisions of Superintendent of Public Instruction.
13. Visit and inspect each school in his division.
14. See that teachers discharge faithfully their duties.
15. Promote the improvement and efficiency of teachers under directions from the Superintendent of Public Instruction by institutes and to preside over these institutes.
16. Require principals to hold patrons' day.
17. Keep a record of his official acts.
18. City superintendents shall assign teachers to their positions and re-assign them at his direction.

CHAPTER LII

DEFECTS IN THE PRESENT ORGANIZATION OF PUBLIC EDUCATION

1. Under its present organization the State Board of Education is not accountable for its acts to the people either through appointment by the Governor or election by the qualified voters of the Commonwealth. Membership on the State Board of Education is incidental to other official duties in the case of the Governor and the Attorney General. The State Superintendent while elected by the qualified voters of the Commonwealth is responsible for his acts to the State Board of Education of which he is an *ex officio* member and president, which board is not under the control of the people.
2. Educational institutions have representatives on the State Board of Education. These representatives are nominated for membership by institutions dependent upon the General Assembly for their budget and are selected from a list of nominees by the Senate which body is a determining factor in fixing the budget of these public educational institutions.
3. As at present constituted the State Board is likely to represent the dominant political party of the State and the institutional aspirations of its higher schools. It should represent the people of the entire Commonwealth, and should, therefore, be a lay board rather than a professional board.
4. An even number of members on such a board is undesirable because of the possible deadlock on important questions of educational policy.
5. It is a well established administrative principle that no person whose full time official position is within the gift of a board should be a member of the board which appoints him.
6. The State Superintendent is at the present time an elective officer. It has been demonstrated repeatedly that the political method is not the proper one for securing expert service of any type. At the time that the office of State Superintendent was created in our American commonwealths it was a clerical and statistical position, and not one of the expert character which it now has become. It should be removed from partisan politics. Candidacy to the office should not be limited to the State. The Superintendent should not be placed in a position where political considerations may influence his decisions.
7. The State Superintendent should not be a member of the board. It is a fundamental administrative principle that one who is to execute a policy should not be a member of the board which determines the policy.
8. The primary function of a State Board of Education is to legislate, to determine State educational policies, to approve plans, and to act on recommendations. The power to appoint the superintendents of local supervisory units is a violation of this principle.
9. In no State with as many public schools as are found in Virginia has it been found feasible to provide a sufficiently large staff of experts in the State Department of Education, properly to supervise and inspect the public schools of the State. Whenever an attempt has been made to do this it has been found necessary to increase materially the personnel of the department. As evidence of this, attention is called to the Building Division of the State Department of Education. There, in order to prepare plans of school buildings outside of cities and to supervise their construction, it has been found necessary to build up a staff of five

people. There is no question but that the work of other divisions, notably those of rural and Negro education, require a staff fully as large as this if supervision and inspection are to be adequate. Whether or not a State Department of Education, so inadequately but capably staffed, should assume responsibility for direct field inspection and supervision is to be questioned.

10. The appointment of the county school board by the School Trustee Electoral Board is a violation of the principle that a board of education should represent the people living in the unit over which it has jurisdiction. Under the present plan of organization the qualified voters of the county have no voice in the administration of their school systems. They elect neither the County School Board, nor the School Trustee Electoral Board.
11. The basis of selection of county school board members is the magisterial district rather than the county at large. There is always a danger that members of a board so selected will be more interested in the educational welfare of the district from which they are selected than in the entire county system of education.
12. The city school boards represent school districts within the city rather than the city at large. The same danger indicated above applies to this method of selecting city school board members. The municipal council of each city appoints three trustees from each school district to constitute the city school board. The qualified electors of the city have here no direct voice in the selection of the board which administers the public system of education.
13. The control of the county school budget is now in the hands of the county board of supervisors. Such a board, which gives its full attention to county governmental matters, other than education, is not in a position to determine wisely the amount of money necessary for the support of public schools of the county. The great variations in the rates of school taxation as between counties as well as the great differences in school facilities and opportunities that exist at the present time indicate the desirability of placing in the hands of the county school board the power of determining up to a statutory maximum the rate of taxation for school purposes.
14. The same general principle indicated above applies to cities. The budget is prepared by the city superintendent and approved by the city school board. The municipal council is the tax-levying body and may reduce the local school budget as it sees fit.

Proposed and Pending Constitutional Amendments

The General Assembly of Virginia at the regular session of 1926 and the extra session of 1927 has approved a basic reorganization of the State government. Among the constitutional changes which have been agreed upon are the following affecting education:

1. There shall be a State Board of Education of seven members, to be appointed by the Governor for a four year term.
2. The present powers of the board relating to the establishment of rules and regulations for the government and administration of schools are to be transferred to the General Assembly.
3. The present power to appoint division superintendents, subject to confirmation by the Senate, is transferred to county and city school boards, subject to certain approval or regulation by the State Board of Education.
4. The right to select textbooks for the public schools of the State is abridged by giving to the General Assembly the right to prescribe the time in which the State Board may change the textbooks.

Recommendations

1. The proposed amendment to the constitution providing for appointment of the State Board of Education by the Governor for a four year term is in general accord with modern State administrative practice, and its adoption is recommended by the survey staff.
2. The State Board of Education should have, in general, the legislative and judicial powers which it now holds. Although the proposed amendment to the Constitution places in the hands of the General Assembly the right to determine the extent of the legislative powers of the State Department of Education, the same amendment legalizes all present rules and regulations of the State Department of Education. It is recommended to the General Assembly that it approve such future rules and regulations as the reorganized State Board of Education shall, after proper deliberation and study of the educational conditions of the State, recommend.
3. The State Board of Education should be given the power to appoint the Superintendent of Public Instruction, to fix his salary and to determine his duties. Attention is called to section 131 of the Proposed Amendments to the Constitution of Virginia, which gives the Governor the power to appoint the Superintendent of Public Instruction for a term of four years. The proposal is unwise. The Governor carries full responsibility through his power to appoint members of the State Board of Education. The State Superintendent is the chief executive officer and expert of the State Board of Education. This expert officer should not be under any political control. In some States where this method of selection has been in use, the office of Superintendent of Public Instruction has been used as a political reward with a view to strengthening the political machine of the dominant political party of the State. The survey staff recommend the application to State educational affairs of the best administrative practice of large business concerns. This involves the granting to the State Board the right to appoint its own executive officers. Under the method recommended in the proposed amendment to the Constitution, power is given to the Governor to appoint the Superintendent of Public Instruction, and the proposed amendment provides further that the General Assembly shall have power after January 1, 1932, to provide by enactment for the election of the Superintendent in such manner and for such term as may be prescribed by statute. This makes possible still another change in the method of selection of the Superintendent within a five year period. Virginia can ill afford the educational cost of such frequent readjustments.
4. It is recommended that the Superintendent of Public Instruction be the executive officer of the State Board of Education, but not a member of the board.
5. An analysis of the present objectives and activities of the State Department of Education is given in Table 56. In view of the fact there set forth that the staff of the State Department of Education is inadequate in point of numbers to assume the direct responsibility either of close supervision or inspection of the public schools of the State, the survey staff recommend a change of emphasis in its activities from the field of supervision and inspection to the field of stimulating local supervisory activities, local curriculum revisions, research, and experimental work in improvement of instruction in local supervisory units, etc. The following statements of the functions of the State Department of Education are suggestive of a change of emphasis which will undoubtedly operate to elevate the importance of the local unit

of education, and will bring about local professional educational stimulus more wide-spread in its effect than that induced through the large amount of office routine, field visitation, and school-house inspection which is typical of the activities of the State Department of Education at the present time. That the State Department is conscious of this need for change in emphasis is evidenced by the fact that 341 days were spent by different supervisors in conference work during the past year, as shown in Table 56.

Recommended Activities of State Department of Education:

- (1) To hold regularly scheduled conferences with groups of division superintendents, high school and elementary school principals, rural supervisors, and other classified educational groups. At such conferences there should be discussed and developed:
 - a. Programs of supervision including the objectives, agencies, procedures, methods of measuring progress, etc.
 - b. Minimum State standards and requirements relating to the course of study, general and special.
 - c. Minimum State standards and requirements relating to the supervisory unit.
 - d. School building standards including sanitation, safety requirements, school building code requirements, school equipment, supplies, etc.
 - e. The improvement of instruction including problems relating to directing the learning process, individual differences, retardation, motivation, selection and organization of subject matter, evaluation of pupil achievement, and related problems.
 - f. Experimental and research projects within the supervisory unit and cooperative State experimental and research groups.
 - g. Training of teachers before service and in service.
 - h. Standards of evaluating the character of instruction.
 - i. The development of character and citizenship training.
 - j. Ways and means of creating a general public interest in the unspecialized problems of education.
- (2) To make public addresses interpreting and stimulating interest in education.
- (3) To make surveys to determine the number, size, and location of public high schools.
- (4) To evaluate the work of the public schools and to make recommendations for their improvement.
- (5) To develop and establish standards for various types of public schools, and for the several special school departments.
- (6) To set up the essential core of the curriculum and certain general standards of progress for the various grades.
- (7) To encourage and promote better standards of professional preparation of teachers.
- (8) To carry on research and investigation to secure a fact basis for an ever progressing program of education in Virginia.
- (9) To provide a school building code with annual revisions to meet newly developed standards.
- (10) To encourage and promote the development of valid permanent reading interests of childhood and youth by developing school libraries and by recommending library book lists.
- (11) To regulate the sale of textbooks within the state.
- (12) To develop a state program of vocational and educational guidance.

- (11) To regulate the sale of textbooks within the State.
- (12) To develop a State program of vocational and educational

In making these recommendations the survey staff are appreciative of the high level of ability and of the efficient work of the State Department of Education. Virginia is to be congratulated upon having so able a State Superintendent, and so well trained an educational staff in its State Department.

6. It is recommended that the staff of the School Buildings Division be decreased and that the policy of furnishing plans, specifications, and supervision of building construction now carried out by the State Department of Education be discontinued. In view of the great need for educational State direction in the field of rural and Negro education, the survey committee believes that at least a portion of the funds now being used for the preparation of school plans may more profitably be expended in providing more adequate State direction in these fields. It is recognized that the present building division is providing more adequate, more sanitary, better ventilated and lighted school buildings than has ever been possible before the creation of this division. The gains which have accrued through the work of the division may be continued by the development of a school building code with proper provision for its enforcement, thus doing away with the necessity of drawing plans and specifications in the offices of the Division of School Buildings. During the fiscal year ending June 30, 1927, out of a total expenditure of \$84,664.05 by the various divisions of the State Department of Education, \$22,357.43, or more than one-fourth of the total amount, was expended by the Division of School Buildings.
7. Since one of Virginia's outstanding educational needs is a more adequate development of the field for rural education, the survey staff recommend the addition of at least one full-time State supervisor to this division to assist in realizing the objectives set forth above.
8. The survey staff recommend the abolition of the School Trustee Electoral Board. At the present time it has but two functions:
 - a. To appoint one trustee from each magisterial district to the county school board. There is no reason to believe that this function cannot be performed by the qualified voters of the county. The present system of school organization gives the people but little voice in the fundamental matters of education. While public education is a function of the State, its direction should be in the hands of the people of the State.
 - b. At present the school trustee electoral board hears appeals from actions of the county board which it appoints. Such appeals may go directly to the Superintendent of Public Instruction or to the State Board of Education since this function is at the present time being performed by them in certain types of cases.
9. It is recommended that the county school board, to consist of five members, be elected at large by the qualified voters of the county, serially, for a term of five years.
10. It is recommended that the appeals by aggrieved citizens from the action of the county school board go directly to the State Board of Education.
11. It is recommended that the present system of subdividing cities into school districts be abolished; and that the city school boards shall consist of five members elected at large, serially, for a term of five years by the qualified voters of the city. The purpose of recommendations 7 and 9 is to give to the people the right to select their representatives for administration of public education.
12. The survey staff approve the transfer of power to appoint division superintendents from the State Board of Education to county and city boards of education.
13. It is recommended that with the change in the method of selecting county and city school boards, such boards be granted the right to determine the tax levy for school purposes within the county and city respectively, subject to a maximum tax limit for school purposes to be fixed by the General Assembly. Provision should be made for a referendum on any school tax levy made by the county or city school board which exceeds the maximum tax levy provided by the General Assembly.

CHAPTER LIII

THE DIVISION SUPERINTENDENT OF SCHOOLS

Virginia has one hundred and twenty division superintendents of school of whom one hundred are county superintendents and twenty are city superintendents. The educational and professional qualifications for appointment have been discussed in Chapter XLVIII. The Constitution provides (section 132) that the State Board of Education shall prescribe the duties of the division superintendents of schools. These duties which appear as departmental regulations in the school laws of the State are summarized in Chapter XLVIII.

Legal Duties of Division Superintendent

Attention is called to the fact that they are fiscal, statistical, and inspectorial in character. The only provisions which relate specifically to the improvement of teaching are those requiring the division superintendent to visit and inspect each school, to see that teachers discharge faithfully their duties, and to provide and preside over institutes to promote the improvement of teachers.

Activities of Division Superintendents

In order to obtain a specific list of activities performed by division superintendents a Checking List of One Thousand Duties of School Administrators, prepared by A. C. Ayer, of the Department of Education of the University of Texas, was sent to each division superintendent. Returns were received in time for tabulation from seventy-eight divisions. While no attempt was made to evaluate these duties, the frequency of mention indicates in general the activities which the division superintendent carries on. A detailed list of these activities with the frequency of mention is found in Table 57. A summary included below gives the general range of such activities:

SUMMARY TABLE 57	Frequency of Mention	%
General Control	4289	13
Office Management and Routine	6255	20
Financial Accounting and Management	1503	5
School Plant	4262	12
Teaching Staff	4341	13
Pupils	3280	10
Curriculum	2270	7
Special Activities	1455	4
Teaching and Testing	1063	3
Supervision of Teachers	1957	6
Special Services	2335	7
	33010	100

The returns from this checking list indicate that in general the division superintendents stress the duties which have been definitely set by the State Board of Education. Attention is called to the table above which gives the percentage distribution of activities based upon the frequency of mention. Activities dealing directly with the general policies of the county or city school board represent 13 per cent of the total frequency. Activities relating to office management and routine have a percentile frequency of 20, while those activities relating to the supervision of teachers have a percentile frequency of 6. Many of the activities relating to the pupils are clerical or regulative in character and represent 10 per cent of the entire frequency.

The Division Superintendent's Relation to Virginia's Major Educational Problem

Attention has been called frequently in this report to the great problem of rural education which Virginia faces. The county superintendent is the executive and supervisory officer directly in charge of this major educational field. Virginia cannot afford to place upon him so many duties of a clerical and legal nature that he has little or no time to give to the great problems of teacher improvement and pupil instruction. One important element in the solution of the rural education problem in Virginia deals with closer and more adequate supervision. The division superintendent is the one who must organize and direct the supervisory activities in his county. So long as he must devote a large portion of his time to the performance of clerical and statistical duties he cannot give to the great problem of supervision the attention which it deserves.

Recommendations

1. The State Board of Education should scrutinize carefully the professional preparation and experience of all candidates for the position of division superintendent of schools. No candidate should be approved who has not completed at least four years of academic and professional preparation in a standard college or teacher training institution, and who has not had, in addition, experience in the type of problems with which he must deal. Political considerations and local influence should not dominate the selection of division superintendents of schools.
2. Provision should be made for adequate clerical service for division superintendents of schools in order to release their time for their important supervisory duties.
3. The State Board of Education should cooperate with the division superintendents of schools in the development of specific supervisory programs covering a period of years.
4. Teachers and principals should be consulted in the preparation of these supervisory programs. They should be discussed with teachers at the annual institutes held in each division. In carrying out these supervisory programs cooperation should be secured from rural supervisors, club leaders, public health nurses, school principals, teachers, agricultural agents, and all other educational agencies within the division. In the development of the supervisory program activities like the following should be made use of:

County Institutes	Classroom visitation
Extension classes	Conferences with teachers
Mimeographed bulletins	Demonstration teaching
Testing programs	Group teachers' meetings
Diagnostic and remedial programs	

The purpose of the recommendations made above is to redirect the activities of the division superintendents from the field of legal, statistical, and clerical duties to the major field of administration of rural school supervision.

DIVISION VIII

School Population Enrollment and Attendance

CHAPTER LIV

THE EDUCATIONAL LOAD OF VIRGINIA

The most powerful factor in the formulation and execution of a State educational policy is the number of children living within that State. The first educational responsibility of any corporate community is provision for adequate educational opportunity of those of school age living within the boundaries of that community. The total school population may be taken as the maximum educational load a State will ever have to carry. However, the actual educational load of a State will never be equal to the school population due to existing physical and mental deficiencies, coupled with many other factors that prevent school attendance of all those of school age. Consequently, school enrollment may be taken as the maximum probable educational load. Again, enrollment and average daily attendance are not equal; so as a measure of the operating educational load of a State, average daily attendance is probably the best single measure. At the same time, it must be borne in mind that the greatest effort must be extended to make sure that school enrollment in a State is in keeping with the total school population and desirable compulsory attendance laws. Marked effort must be constantly exerted to maintain the proper relation between school enrollment and average daily attendance. In addition to these factors, the length of the school term plays an important part in determining the educational problem within a given area. Consequently, it is obvious that any discussion pertaining to Virginia's educational load must be centered around school population, enrollment, average daily attendance, the school term, and compulsory attendance laws and their enforcement.

The Meaning of School Population

The technical meaning of school population is the number of children whose ages fall within certain age limits that have been established by statutory provision. The definition of school age in Virginia is from seven to nineteen, inclusive. According to this definition, the school population of Virginia during the year 1925-26 was 701,534.* However, the schools are free to any child six years of age, if, in the judgment of the division superintendent, the child has reached such a stage of maturity as to render it advisable for him to enter school. As a basis for establishing or determining school population, the limits of seven to nineteen are subject to severe criticism. There are twice as many children six years of age as at all ages between sixteen and nineteen, inclusive. Also, the number of six year old children is nearly 75 per cent as large as the number of seven year old children. The number of five and six year old children combined equals nearly 80 per cent of the seven year old children. The inclusion of nineteen year old individuals on the upper limit of the educational load is indefensible with the present policy of Virginia concerning public education. A study of the age-grade distribution of the State shows that out of a total of 542,515† pupils, less than 5,000 were eighteen years of age. Since this is less than 1 per cent of the total attending school population, it appears obvious that the desirable limits of the school census should not include nineteen. The best limits, and those most commonly accepted for compulsory attendance laws, are five to eighteen. These limits are in keeping with the recommendations of the United States Bureau of Education. In order to make a definition of school census of proper administrative value, it is essential to collect data, not only

*Annual report of the superintendent of public instruction, 1926, p. 14.

†Annual report of the superintendent of public instruction, 1926, p. 115.

pertaining to the age of children, but also the character and nature of schooling. Likewise, it is imperative that very definite provision for a continuing cumulative census be made. The present law calls for the taking of the census every five years. This should be changed to a continuing census record that would form the basic foundation for the formulation of both local and State policies in respect to public education.

School Enrollment and Attendance

Gross per cent trends in the school census, enrollment, and attendance in Virginia during a twenty five-year period, 1900-1925, are presented in Tables 58 and 59. It will be observed that the white school population of Virginia shows a marked increase during each of the five year periods. The colored school population, however, according to available data, does not show a corresponding rate of growth. This latter fact may be accounted for on the basis of inefficient census taking among the colored population, or by the somewhat large exodus of this group during the last few years. In studying enrollment and attendance figures in Virginia in relation to the total school population, the census definition of seven to nineteen years should be remembered. An analysis of the data presented in Tables 58 and 59 indicate a very conscious effort since 1915 to improve the relation between school enrollment and total school population. However, when one realizes that there was a difference of approximately 150,000 between school population and school enrollment during the year 1925-26, striking evidence is at hand to show that a very large portion of school population is not even being enrolled at the present time. According to the State Superintendent's annual report, some 35,000 children of school age are enrolled in private schools, but, even after making allowance for this group, there remains about 16 per cent of the school population that is not enrolled in any school in Virginia. A further analysis of the school population, school enrollment, and school attendance shows that there is approximately 18 per cent of the white school population that is not enrolled in school, and about 30 per cent of the Negro population is not enrolled in any school. The average daily attendance among the whites is approximately 79 per cent of the total enrollment of the whites, while the corresponding figure for the Negroes is only 72 per cent. Only 313,996 out of 484,732, or about 64 per cent, of the white children on census were in average daily attendance, while only 110,697 out of 216,802, or about 51 per cent, of the Negro census were in average daily attendance for the school year 1925-26. The disparity between total population and average daily attendance is very obviously high and indicates either the need of more rigid compulsory attendance laws or more exacting enforcement of existing compulsory attendance laws.

Concerted effort should be expended in conducting a very exhaustive "sales" campaign of public education in Virginia. This effort should be directed particularly to the white population, for, although Virginia faces the task of improving school attendance of both whites and colored to a very marked degree, at the same time it seems clear that the first step in this program is a full realization of the importance of public education by the entire white population. Obviously, the matter of school enrollment and attendance within a State is determined to a large degree by the adequacy and efficiency of existing compulsory attendance laws and their enforcement. Consequently, specific recommendations concerning enrollment and average daily attendance will be reserved until the compulsory attendance law of Virginia has been discussed.

The School Term

As is shown by Figures 14 and 15, Virginia has exerted no little effort during the past decade in lengthening the average school term. Attention is called to the fact that among the white non city schools during the school

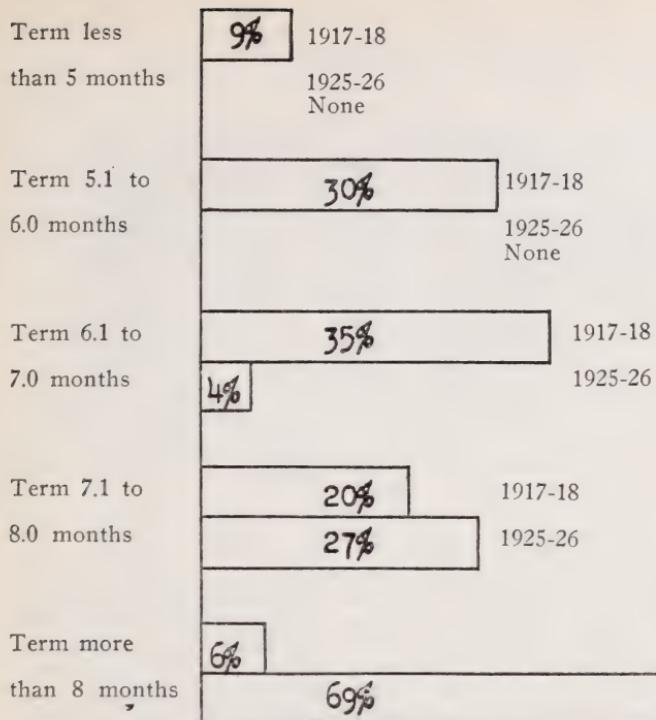


Figure 14.—Comparison of average school term in white noncity schools, 1917-1918 and 1925-1926.

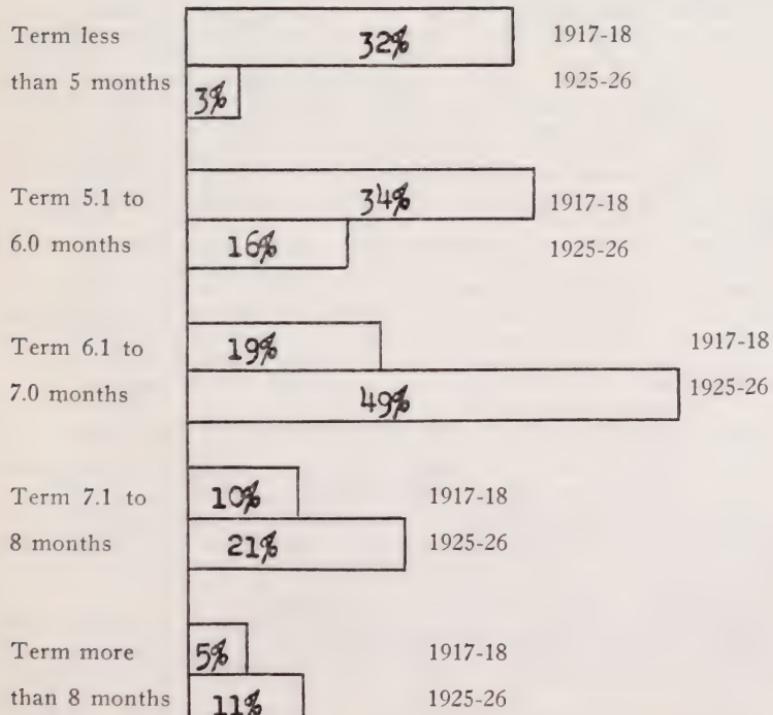


Figure 15.—Comparison of average school term in colored noncity schools 1917-18 and 1925-26.

year 1925-26, there were no terms less than six months, while for the school year 1917-18, 39 per cent of the white noncity schools had terms less than six months. Further evidence of the improvement in respect to the length of term is the fact that 69 per cent of the white noncity schools during 1925-26 had terms exceeding eight months, while the corresponding figure during 1917-18 was only 6 per cent. Lengthening of the school term for the colored schools, as well as white schools, is evidenced by the facts presented in Figure 15. The most striking condition revealed here is the fact that 81 per cent of the colored noncity schools had terms exceeding six months in 1925-26, while in 1917-18, 66 per cent of the schools had terms less than six months. Although such progress is to be commended, at the same time, Virginia should by all means establish a nine months term as the standard period for which schools for both white and colored should be maintained each year. As will be brought out in a later recommendation, one of the most effective ways of bringing this about is by changing the basis for apportioning school funds so that a minimum term of at least one hundred and sixty days will be required.

Retardation and Progress

One of the most important measures of the efficiency of a school system is the extent to which the pupils of that particular school are able to absorb the established curriculum. This fact is best measured by the per cent of pupils promoted, per cent failed, and per cent dropped, along with certain age-grade comparisons. The condition concerning pupils promoted, failed, and dropped in Virginia schools is shown in Table 60, and the age grade comparisons in terms of per cents are offered in Tables 61, 62, and 63. A study of these data show that during the school year 1925-26, an average of 32 per cent of the white elementary school pupils either failed or left school. The corresponding figure for the high school for this year is 23 per cent. The corresponding figures for the colored elementary grades is 35 per cent and for the colored high schools 22 per cent. Interpreting these figures, it should be borne in mind that, in all probability, equal standards of grading and classification were not applied throughout, and also that the colored high school population is much more highly selective in relation to the total colored population than is the white population in relation to the total white population. Attention is called to the fact that there is tremendous overageness in the State as a whole among both white and colored schools. Also, attention is again called to the fact that Virginia uses seven years as an entrance age, instead of six. Since six years is the usual entrance age for the first grade throughout the country, the number of over age children in the Virginia schools is really much larger than that shown in Tables 61, 62, and 63.

From the data presented in Tables 60, 61, 62, and 63, it would seem that one or more of the following changes are needed: (1) A curriculum revision that would produce work better adapted to the capacities and abilities of school children; (2) a uniform system of measuring pupil achievement, and (3) more discriminating attention given to classroom instruction.

The Compulsory Attendance Law—Its Provisions and Enforcement

The most influential factor in proper school enrollment and school attendance is an adequate compulsory attendance law with binding provisions for its constant and rigid enforcement. The present compulsory attendance law was enacted in 1922 and became effective in 1923. Its many defects are obvious after even a cursory reading.

*k. Attendance compulsory between certain ages:

1. Be it enacted by the General Assembly of Virginia:

Section 1. Every parent, guardian, or other person in the State of Virginia, having control or charge of any child, or children, who

have reached the eighth birthday and have not passed the fourteenth birthday, shall send such child, or children, to a public school, or to a private, denominational or parochial school, or have such child or children taught by a tutor or teacher in a home, and such child, or children, shall attend regular school during the period of each year the public schools are in session and for the same number of days as in the public schools. The period of compulsory attendance shall commence at the beginning of the school which the pupil attends. But the provision of this section shall not apply to a child between the ages aforesaid who has completed the elementary course of study prescribed by the State Board of Education, or the course of study provided by the school he should attend, and who is actually, regularly and lawfully employed; nor to any child who lives more than two miles by the nearest traveled road from a public school, unless public transportation is provided within one mile of walking distance from the place where such child lives.

Section 2. For the purpose of this act instruction in a private, denominational, or parochial school, or in a home by a tutor or other teacher, shall be deemed equivalent to instruction in a public school.

Section 3. Any child who is physically or mentally incapacitated for the work of the school is exempt from the provisions of this act, but the division superintendent of schools shall have the right, and he is hereby authorized, when exemption under the provisions of this section is claimed by any parent, guardian, or other person having control of any child or children for physical incapacity, to require from a practicing physician a properly attested certificate, issued after such an examination as may be specified by the State Board of Health, and such child or children should not be required to attend school on account of some physical condition which renders attendance impracticable or inexpedient, and if for mental incapacity the division superintendent shall have the right, and he is hereby authorized to require the child to submit to such mental test or tests as may be prescribed by the State Board of Education.

Section 4. Any parent, guardian, or other person having control of a child, who fails to send such child to school as required by this act; or any parent, guardian, or other person who makes a false statement concerning the age or school attendance of a child between the ages of eight and fourteen years who is under his control, such false statement being made with the intent to evade the provisions of this act; or any person who induces or attempts to induce any child to be absent unlawfully from school, or who knowingly employs or harbors while school is in session any child absent unlawfully from school; or any person who commits any offense under this act for which no specific penalty is provided herein, shall be guilty of a misdemeanor and on conviction shall be fined not exceeding twenty-five dollars.

It is hereby made the duty of all attorneys for the Commonwealth in their respective counties and cities to prosecute all cases arising under this act. In cities or counties having juvenile and domestic relations courts, these shall have exclusive original jurisdiction for the trial of all cases arising under this act.

Section 5. In any case where the tribunal before which any prosecution is brought for violation of the provisions of this act shall, after inquiry, find as a fact that the parent, guardian, or other person having control of the child or children is unable to provide necessary clothes in order that the child or children may attend school in compliance with the law, such parent, guardian, or other person having control of the child or children shall be acquitted, and such child or children shall be deemed to be dependent. But the local school board may, in

any case in its discretion, furnish such child or children with the necessary clothes, to be paid for out of any funds available, and in this event such child or children shall be sent to school as provided in section one of this act.

Section 6. Within fifteen days after the opening of the school each principal teacher shall report to the division superintendent the names of all pupils enrolled in the school, giving age, grade, and the name and address of parent or guardian. Said teacher shall in like manner submit an auxiliary list giving to the best of his information the names of children between the ages of eight and fourteen who reside within two miles of the school or within one mile of a wagon route and who are not enrolled in school. The division superintendent shall check these lists with the last school census and with reports from the Bureau of Vital Statistics. From these reports and from any other reliable source the superintendent shall, within fifteen days, make a list of the names of children who are not enrolled in any school, and who are not exempt under the provisions of this act. The division superintendent or the attendance officer, if one is employed, shall investigate all cases of nonenrollment, and when no valid reason is found, shall notify the parent, guardian, or other person having control of the child, and require the attendance of such child at the school within five days from the date of such notice. A list of persons so notified shall likewise be sent to the principal teacher of the school. If the parent, guardian, or other person having control of the child do not within the specified time comply with the provisions of this act, the division superintendent shall report the facts to an attendance officer, if one be employed, and it shall be the duty of said officer, to whom the facts are reported, to make complaint in the name of the Commonwealth of Virginia before a justice of the peace, or a police justice of the magisterial district or city in which the parent, guardian or other person having control of the child resides; or complaint may be made in the corporation or circuit court of the city or county in which said parent, guardian, or other person having control of the child resides (provided that where juvenile and domestic relations courts are maintained, such courts shall have jurisdiction in all cases arising under this act), which officers and courts are hereby clothed with jurisdiction over all offenses and proceedings under this act with full power to hear and try all complaints, impose fines and penalties and fully execute the provisions of this act.

Section 7. An accurate daily record of attendance of all children between eight and fourteen years of age shall be kept by the teacher of every public school. Such record shall at all times be open to any officers duly authorized to enforce the provisions of this act who may inspect or copy the same.

The principal, or head teacher of every public school shall, whenever a case arises, report to the attendance officer or other person duly authorized to enforce the provisions of this act, the name, date of absence, and address of parent, guardian or other person having charge of such child, of all pupils enrolled who are unexpectedly absent from school according to the provisions of this act, the validity of the excuse to be determined in each case by the judgment of the teacher.

If any parent, guardian, or other person having charge or control of a child between the ages of eight and fourteen years causes, permits, or allows such child to be absent from school unlawfully for five days or its equivalent in any school month he shall be notified in writing by the attendance officer or the division superintendent to cause said child to attend school. If after service of such notice, said child is again absent unlawfully during that school month, or is absent from school

unlawfully five days or its equivalent during any subsequent school month of that school year, the parent, guardian, or other person having charge or control of said child who has failed or neglected to use all proper means to compel attendance of said child shall be guilty of a misdemeanor, and upon complaint by the attendance officer, division superintendent, or other person authorized to enforce provisions of this act and upon conviction thereof shall be punished by a fine of not more than twenty-five dollars (\$25).

Provided, that in the discretion of the local school board nonenrollment or nonattendance upon school on account of necessary work during certain seasons of the year may be considered lawful and valid excuse for such temporary nonenrollment or nonattendance.

Section 8. Every local school board shall have power to appoint with the approval of its division superintendent of schools, one or more attendance officers, who shall be primarily charged with the enforcement of this act, and for such purpose only such attendance officers are hereby vested with the powers and authority of police officers and constables; provided, that in the county or city where no attendance officer is appointed by the local school board, the division superintendent of schools shall act as chief attendance officer. Attendance officers shall be compensated for their services in such sums, or by such fees as shall be determined by their local school boards, upon the recommendation of the division superintendent of schools. Every attendance officer shall keep an accurate record of all notices served, all cases prosecuted, and all other services performed, and shall make an annual report of the same to the school board appointing him.

Section 9. It shall be the duty of the State Superintendent of Public Instruction to formulate such rules and regulations and provide such assistance in his office as shall be necessary for the proper and uniform enforcement of the provisions of this act in cooperation with the local school authorities. He shall prepare and furnish such blanks for attendance officers, teachers, and other school officials as may be necessary for reporting each case of nonattendance to the chief attendance officers or other person charged with the enforcement of this act.

Section 10. In case any pupil has become habitually truant, or because of irregular attendance or misconduct, has become a menace to the best interest of the school which he is attending, or should attend, then it shall be the duty of the attendance officer or such other person as may be charged with the enforcement of this act, to report such fact and condition to the parent, guardian, or other person having control of such child, who shall be held liable under the provisions of this act for the regular attendance and good conduct of such child, unless such person, guardian, or other person having control of such child shall state in writing that he or she is unable to control such child, whereupon said officer shall proceed against such child as a delinquent child before a tribunal of competent jurisdiction.

Section 11. Nothing in this act contained shall apply to any child or children who for cause have been excused from the operation of this act by the local school board.

Section 12. Any county or city which may be without adequate buildings for the proper enforcement of this act at the time the same becomes effective is hereby allowed two years from the date on which it becomes effective to make ample provisions for its enforcement; but this time shall be extended if, in the opinion of the local tax levying authorities of any county or city, such county or city is unable to provide adequate facilities for all of the children subject to enroll-

ment hereunder, and the length of such extension shall be determined by said local authorities. Provided, however, that the school board of any county or city, the board of supervisors of the county or the council or other governing body of the town or city concurring, may exempt its county or city from the provisions of this bill; which exception may be rescinded at the pleasure of said bodies.

Section 13. An act entitled an act to provide (in certain cases) for the compulsory attendance of children between the ages of eight and twelve years upon the public schools of Virginia and to repeal an act entitled an act to provide (in certain cases) for the compulsory attendance of children between the ages of eight and twelve years upon the public schools of Virginia, and providing penalties for failure, and designating the manner of collecting such penalties, approved March fourteenth, nineteen hundred and eight, approved March twenty-seventh, nineteen hundred and eighteen, is hereby repealed.

In an effort to ascertain present conditions concerning the enforcement of the compulsory attendance laws, the following questionnaire was sent to the county and city superintendents:

TO THE DIVISION SUPERINTENDENT:

1. Total number of cases of non-attendance reported to your office by teachers since the act went into effect in 1922 (1922-1926).
2. Total number of cases prosecuted in court.....
3. Total number of convictions (carrying fines).....
4. Total number of cases involving conviction for a second offense.....
5. Number of truant officers employed; give salary of each.....
6. If no cases have ever been reported in your division, please state briefly the attitude of your local school board towards compulsory education.....

Data from Counties

INFORMATION CONCERNING ENFORCEMENT OF COMPULSORY EDUCATION	No. of Counties Reporting
Total number of cases of nonattendance reported, 1922-26:	
Number replies on this item.....	19
Exempted under section 12 of the act	4
Number cases reported	10
1 to 100 cases reported	14
101 to 200 cases reported	13
201 to 500 cases reported	13
501 to 1,000 cases reported.....	13
More than 1,000 cases reported	7
Total number of counties reported	93
	—
Total number of cases prosecuted in court:	
Number replies on this item	11
Number cases prosecuted	42
1 to 5 cases prosecuted	14
6 to 10 cases prosecuted	7
11 to 25 cases prosecuted	6
More than 25 cases prosecuted	9
Total number of counties reported	89
	—

	No. of Counties Reporting.
Total number of convictions:	
Number replies on this item	13
Number convictions	45
1 to 5 convictions	18
6 to 25 convictions	6
26 to 100 convictions	6
More than 100 convictions	1
Total number of counties reported	89
Total number of convictions for second offense:	
Number replies on this item	13
Number convictions	65
1 to 5 convictions	8
More than 5 convictions	3
Total number of counties reported	89
Number of truant officers employed:	
Number truant officers employed	47
Superintendent acts as truant officer	14
One or more truant officers employed	9
Lack of funds to employ truant officers.....	8
Total number of counties reported	89
Salaries of truant officers:	
Number replies on this item	78
Officers employed but salary not quoted	2
Salaries of \$25 to \$375 per year	5
Salaries of \$3 to \$5 per day	2
Paid at rate of 50 cents per case	2
Total number of counties reported	89
Attitude of local school board towards compulsory education:	
Number expressions of opinion	56
Favorable	17
Unfavorable	12
Indifferent to Negroes	4
Total number of counties reported	89
Remarks:	
Insufficient room for Negroes	9
Lack of buildings and equipment	10
Lack of funds to employ enough teachers	5
Law leniently enforced	15
Board believes law enforceable	2
Board does not believe law enforceable	5
Attendance secured without law enforcement	7
Law too easily evaded	3
Board decides definitely not to enforce law	4
Board or superintendent believes new law needed.....	4
Total number of counties in State of Virginia, 100:	
Replied to questionnaire, giving data	89
Exempted under section 12 of the act	4
Number replies to questionnaire	7
Total	100

Data from Cities

INFORMATION CONCERNING ENFORCEMENT OF COMPULSORY EDUCATION	No. of Counties Reporting
Total number of cases of nonattendance reported, 1922-1926:	
Number replies on this item	4
Number cases reported	3
1 to 10 cases reported	2
11 to 150 cases reported	2
151 to 500 cases reported	5
501 to 1,000 cases reported	3
1,001 to 5,000 cases reported	2
More than 5,000 cases reported	2
Total number of cities reported	23
	<u>—</u>
Total number of cases prosecuted in court, 1922-26:	
Number replies on this item	3
Number cases prosecuted	5
1 to 10 cases prosecuted	5
11 to 25 cases prosecuted	3
26 to 50 cases prosecuted	3
51 to 110 cases prosecuted	2
More than 110 cases prosecuted	2
Total number of cities reported	23
	<u>—</u>
Total number of convictions, 1922-26:	
Number replies on this item.....	4
Number convictions	10
1 to 5 convictions	3
6 to 20 convictions	3
More than 20 convictions	3
Total number of cities reported	23
	<u>—</u>
Total number of convictions for second offense:	
Number replies on this item	5
Number convictions	10
1 to 5 convictions	5
More than 5 convictions	3
Total number of cities reported	23
	<u>—</u>
Number of truant officers employed:	
Number truant officers employed, superintendent or city officials act as truant officers.....	7
One or more truant officers employed	11
Number funds to employ truant officer.....	2
Number replies on this item.....	3
Total number of cities reported	23
	<u>—</u>
Salaries of truant officers:	
Number replies on this item	3
Number salaries paid to officers	7
\$10 to \$130 per month	5
\$250 to \$1800 per year	8
Total number of cities reported	23
	<u>—</u>

Attitude of local school board towards compulsory education :	
Number replies on this item	14
Favorable	8
Unfavorable	1
Total number of cities reported	23
Remarks :	
Lack of buildings and equipment	1
Insufficient room for negroes	1
Law not enforced due to negro population	1
Attendance secured without law enforcement	2
Board wants new law with "teeth in it"	1

It will be seen that not only is no effort being made in the majority of the communities to press criminal charges against violators, but even when some little effort is exerted, the number of convictions is insignificant when compared with the rather general flagrant violations of the existing compulsory attendance law.

In conclusion, then, it may be said that the law is generally inadequate and poorly formulated. One of the worst sections is that pertaining to the enforcement of the law. Under the existing statutes the administration of the law is delegated in rather loose fashion to the classroom teacher and the superintendent of schools. Classroom teachers cannot be expected to assume the functions of a compulsory attendance officer. Also, it has proved generally unsatisfactory to try to bring criminal charges against parents for violations of the compulsory attendance laws. A much better provision would carry civil, rather than criminal charges for violations of the laws.

Recommendations

I. That for purposes of school census, school age is defined as five to eighteen, inclusive, and that school population be estimated on the basis of the number of children of those ages.

II. That school funds be apportioned on this basis rather than on the present basis of school population between the ages of seven to nineteen, inclusive.

III. That the State Constitution be amended by striking out the compulsory attendance provision as at present, and that the compulsory attendance law of 1923 be amended (1) so as to provide for the compulsory attendance of children who have reached the seventh birthday and have not passed the fifteenth birthday, (2) so as to establish a minimum school term of 160 days, (3) so as to provide for compulsory attendance throughout the year, (4) so as to abolish exemption on the basis of the ability to read and write, (5) so as to provide that exemption for physical or mental disability shall be granted by the county or city board, (6) so as to provide that county school boards shall be obligated to employ attendance officers, (7) so as to obligate each city board to employ necessary attendance officers, (8) so as to necessitate the keeping of cumulative census records on the basis of both individual children and family groups of children.

IV. That the State Department of Public Instruction shall revise the annual reports required of the county and city superintendents in keeping with the recommendations in III (7) and (8), and in accordance with forms (5 of them) in the appendix.

CHAPTER LV.

SCHOOL ACCOUNTING

The Problem of School Accounting

The word *accounting* for many years meant to the average professional educator a general financial statement, showing with only approximate accuracy the gross receipts and expenditures of a school system, with a few major items such as salaries and full costs specifically identified. With the ever-increasing query of the cost of public education on a unit or activity basis, school administrators soon realized that such facts could be ascertained only if pupils and teachers were also included in a comprehensive accounting system. A few progressive men, most of whom reside in the largest cities, have also taken cognizance of the need of including property in the problem of school accounting. If school expenditures are to be justified, and if programs for the expansion of public education are to be continued, it is imperative that school accounting be recognized as a threefold problem, namely:

- I. Accounting for People.
- II. Accounting for Property.
- III. Accounting for Money.

I. Accounting for People—

A. Administrative officers—

1. Educational:
(Superintendents, associate superintendents, assistants, directors, principals, etc.)
2. Noneducational:
(Engineers, head janitors, secretaries, etc.)

B. Nonadministrative Officers—

1. Educational:
(Supervisors, teachers, etc.)
2. Noneducational:
(Engineers, janitors, clerks, employees, etc.)

C. Pupils—

D. School Constituency—

II. Accounting for Property—

A. Sites—

1. Building already erected:
 - a. Administration offices;
 - b. Schools;
 - c. Warehouses;
 - d. Teacherages, garages, etc.
2. Vacant sites for:
 - a. Administrative offices;
 - b. Schools;
 - c. Warehouses;
 - d. Teacherages, garages, etc.
3. Athletic and playground.

B. Buildings—

1. Administration offices;
2. Schools;
3. Warehouses;
4. Teacherages, garages, etc.

- C. Equipment—
 - 1. Administrative;
 - 2. Institutional;
 - 3. Janitorial and engineering.
- D. Supplies—
 - 1. Administrative;
 - 2. Instructional;
 - 3. Janitorial and engineering.
- E. Books—
 - 1. Regular texts;
 - 2. Supplementary texts;
 - 3. Reference (including library).

III. Accounting for Money—

- A. Receipts;
- B. Advancements;
- C. Expenditures.

The survey commission has not considered the problem of property accounting save in its basic relation to personal and financial accounting. However, a continuing inventory of the school plant is indispensable for sound administrative procedure in respect to a variety of functions such as the development of a sound building program covering a relatively long period of time, teacher selection and placement, and budgetary procedure. Consequently, it is strongly recommended that the problem of property accounting be studied simultaneously with the problems of personnel and financial accounting.

Present Practices in Personnel Accounting in Virginia

The State Department of Education has recognized the importance of personnel accounting and has undertaken to furnish the basic forms necessary in this connection. In this direction, a variety of blanks are distributed to the county and city superintendents each year. However, as is often the case, these forms are in some respects not best adapted to local conditions and, consequently, are not fully used.

In an attempt to ascertain the present practice in respect to personnel accounting, twelve county superintendents and six city superintendents were asked to submit sample copies of all forms used by them but not furnished by the State. These eighteen communities were chosen after the one hundred counties and twenty-three cities were classified under one of three degrees of accounting efficiency by five members of the staff of the State Department of Education. As has been previously suggested, this study revealed the fact that the blank forms now provided by the State are insufficient for present needs, and that a large number of forms in addition to those furnished by the State are used. This, of course, makes the need of a careful revision of personnel records obvious. Several members of the State department and superintendents have already recognized this and have set about to revise certain local systems. The work of Mr. McQuilken, superintendent of schools at Roanoke, on this project is particularly praiseworthy.

Recommendations

In order that the problem of personnel accounting may be organized around the problems that arise in the schools, it is recommended that the following basic divisions be considered:

First:

I. Personnel Accounting—

A. Administrative officers—

1. Educational:

(Superintendents, associate superintendents, assistants, directors, principals, etc.)

2. Noneducational:

(Engineers, head janitors, secretaries, etc.)

B. Nonadministrative officers—

1. Educational:

(Supervisors, teachers, etc.)

2. Noneducational:

(Engineers, janitors, clerks, employees, etc.)

C. Pupils.

D. School constituency.

Second, That after proper provision has been made for the taking of a continuing census record, the pupil accounting records shall be based around the following forms:

1. Continuous Census Card—

2. Registration Cards—

a. For elementary grades;

b. For junior and senior high school.

3. Entrance, Transfer and Promotion Cards—

a. For teacher;

b. For principal;

c. For superintendent.

4. Report Cards—

a. Elementary grades;

b. Junior high school;

c. High school:

1. Subjects listed;

2. No subject listed.

5. Permanent School Record Cards—

a. Elementary card, duplicate for principal and superintendent;

b. Junior and senior high school, duplicate for principal and superintendent.

c. Grades and high school, duplicate for principal and superintendent.

6. Ability and Achievement Record.

7. Student Program Cards—

a. For straight program;

b. For split unit program.

8. Physical and Dental Record Card.

9. Teacher's Class Record Book.

10. School Register.

and third, That care be taken to see that any forms adopted by the State conform to the following standards:

1. The size of cards should conform to regular filing sizes so that standard sized filing cases can be obtained to house them.

2. The color of the stock should be selected on the basis of ease of identification and frequency of use.

3. The weight of the card stock should be based upon the frequency of handling and the filing space available.

4. The information called for or given on the forms should be that which is essential in serving the purpose of the record system. Irrelevant and nonessential information should find no place on the cards.

5. There should be no gaps in the record system. It should present a complete school history of the pupil.

6. Certain record cards should be present singly, others in duplicate; others should be in triplicate, so that teachers, principals and superintendents will each have immediate access to the records necessary for his or her office.

Present Practices in Financial Accounting in Virginia

It is generally recognized that public education must be administered in accordance with the same principles of business efficiency as govern modern commercial institutions. The first basic requirement for such effective administration is a sound system of financial accounting, including the most efficient schemes of ordering, requisitioning, payment, delivery, storage, and distribution of school supplies. The extent to which financial statistics issued by a State department of education are valid and, consequently, of real service depends upon the type of accounting systems that operate in the various local school communities.*

In order to determine the present practice in accounting of local school monies, sample sets of the accounting systems from twelve county offices and six city school systems were analyzed. These eighteen sample forms were chosen by the same procedure as were the samples of child accounting forms.

An examination of the forms used indicate that the local systems of financial accounting now in use do not provide for the allocation of receipts and expenditures in accordance with the recommendations of the N. E. A., sound principles of accounting, nor the State reports. Also, there is no provision made for advancement.†

The variance of the accounting systems from standard accounting procedure is most unfortunate, since it makes valid comparisons of school costs in other sections of the country impossible. In some instances, for example, Richmond, two sets of books are kept, one in accordance with the State financial report and the other in keeping with the biennial financial report submitted to the United States Bureau of Education. Such a practice is obviously inordinately expensive, and while commendable under existing conditions, should be entirely unnecessary.

The Function of the State Department in Local School Financial Accounting

One of the most effective ways in which a State department of public instruction can influence local systems of financial accounting is by adopting standard bases for the allocation of expenditures and receipts in the financial report that the local school officers make each year to the State department. The financial section of the annual report which the county and city superintendents make to the State department approaches standard accounting procedure much more nearly than is true in the majority of States. However, there are certain fallacies in the existing reports that should be corrected immediately. For example, the present report form carries no major account covering coordinate activities. Likewise, insurance and rent are included under maintenance when they distinctly fall under the heading of fixed charges. Also, certain items covering transactions that invariably appear among the city systems have been omitted from the present report form. In order that both the local accounting systems and the statistics published by the State department may conform to the practice of the United States Federal Bureau of Education, it is recommended: (1) That the items for distributing receipts be modified to conform to the following divisions.‡

*Local committees here means county or city.

†A Handbook of Financial Accounting for Schools, p. 7. John Guy Fowlkes, Eau Claire Book and Stationery Co., Eau Claire, Wis., 1924.

‡Fowlkes, John Guy, Handbook of Financial Accounting, pp. 6-7.

Receipts

Revenue Receipts:

1. General appropriations from Federal, State, and county sources.

Specific Appropriations: Federal, State, and county.

2. High school, junior high school or graded school.

3. Agriculture.

4. Commercial department.

5. Household arts.

6. Industrial arts.

7. Special children: Deaf, dumb, blind, crippled, etc.

8. Teachers' training and other special aid.

Local Revenue Receipts:

9. Local or district levy.

10. Tuition for grades.

11. Tuition for high school.

12. Fees: Locker, semester, breakage, etc.

13. Net proceeds from rent or sale of textbooks, supplies, etc.

14. Income from property or funds.

15. Total revenue receipts.

Non-Revenue Receipts:

16. Proceeds from bond sales and loans: Temporary or from State funds.

17. Sales of property and proceeds of insurance adjustments.

18. Other nonrevenue receipts.

19. Total nonrevenue receipts.

20. Total receipts.

(2) That the division of advancement accounts be introduced in accordance with the following divisions:*

Advancement Sheet:

1. Textbooks.

2. General school supplies.

Special Supplies:

3. Agriculture.

4. Commercial.

5. Fine arts.

6. Household arts.

7. Industrial arts.

8. School lunches.

Physical Education (including athletics).

(3.) That bases for distributing expenditures shall be as follows:

- (a.) General control.

- (b.) Instruction.

- (c.) Operation.

- (d.) Maintenance.

- (e.) Fixed charges.

- (f.) Debt service.

- (g.) Co-ordinate activities.

- (h.) Auxiliary agencies.

- (i.) Capital outlay.

As a means of incorporating and maintaining accounting practice in accordance with this recommendation, it is proposed that the State Superintendent of Public Instruction will provide for conferences between the city and county superintendents for a study of the accounting system coincident with the recommendations here made. Further, it is proposed that the State Department of Public Instruction maintain a consulting relationship to the local school systems in respect to accounting problems that arise.

*A Handbook of Financial Accounting for Schools, p. 8. John Guy Fowlkes, Eau Claire Book and Stationery Co., Eau Claire, Wis., 1924.

DIVISION IX

Educational Finance

CHAPTER LVI

VIRGINIA'S TOTAL PUBLIC EXPENDITURES FOR EDUCATION

In the year ended June 30, 1927 a total of \$21,413,112.11 was contributed from public funds for the support of public education in Virginia.

Local governments contributed \$14,167,147.30 of this total, all of which was devoted to elementary and high schools. The State government contributed \$7,081,829.81, of which \$164,135.00 went to the administrative expenses of the State Board of Education, (including \$101,082.00 in salaries paid to the local superintendents); \$5,531,254.27 went to the support of local elementary and secondary schools and \$1,550,575.54 went to institutions of higher education. Of this latter sum, \$340,443.75 was devoted to teacher training institutions and \$1,210,131.79 to the other six institutions of higher learning.

Statement I presents a classification of the receipts of the elementary and high schools by political divisions and sources and it shows that of the total receipts, the State contributed 23.43 per cent, the counties 20.44 per cent, districts (exclusive of the cities) 12.62 per cent, and cities 26.94 per cent.

Statement II presents a classification of the sources of the receipts of the institutions of higher education, including the four teachers colleges. It discloses that these ten institutions derived twenty-seven per cent of their funds from State appropriations.

State appropriations constituted 25.80 per cent of income of the State teachers colleges, and 35.05 per cent of the income of the other six institutions. For all the institutions of higher learning, receipts from registration and tuition fees amounted to \$1,428,442.50, or twenty-five per cent of the total. In the State teachers colleges, 11.76 per cent of the receipts was derived from this source, and in the other institutions, 28.78 per cent.

School taxes in the year ended June 30, 1927, according to Statement III, constituted 67.08 per cent of the total receipts. The amount and the percentages of the total receipts derived from the various levies were as follows:

State levy	\$3,537,463.18	14.98 per cent.
County levies	4,377,748.07	18.54 per cent.
District levies	2,886,117.46	12.23 per cent.
City levies	5,036,580.04	21.33 per cent.

The amounts appropriated from general funds were as follows:

From State general fund.....	\$1,799,621.35	7.62 per cent.
From county funds	380,950.20	1.62 per cent.
From city funds	1,323,778.84	5.60 per cent.

Since the income of both State and local government is from taxes, we may consider appropriations from general funds as taxes, so that of the total receipts of elementary and high schools, eighty-two per cent was derived from taxation.

Statement III, from which these figures are taken, presents a classification of the receipts of the elementary and high schools by sources and shows the amount of receipts, and percentages of the total, derived from State and local school tax levies, from appropriations from general funds, and from other miscellaneous sources.

The total receipts of the educational system were \$29,252,823.39, 80.1 per cent of which was receipts of elementary and secondary schools, and 19.9 per cent receipts of institutions of higher learning. School taxes and appropriations from public school funds constituted 71.3 per cent of the total, the next largest item being borrowings, which made up 10.6 per cent. Details of receipts from all sources are presented in Statement IV.

The total cash resources of the elementary and secondary schools for the year ended June 30, 1927, were \$25,896,307.94. The balances on hand at the beginning of the year amounted to \$2,286,448.19, as shown in Statement V.

The total disbursements of the elementary and secondary schools and institutions of higher learning were \$29,557,687.62. Disbursements for current expenses amounted to \$22,934,759.30, capital outlay \$4,775,927.65, and for redemption of debt \$1,847,000.67. A classification of these disbursements by functions will be found in Statement VI.

It will be noted that the difference between actual receipts and disbursements is very small in amount. Having regard to the large number of more or less independent units in the educational system, this fact is significant. Generally a large number of separate units with independent treasuries makes for an accumulation of cash balances that cannot be employed advantageously, and for substantial differences between the amounts received and disbursed. The aggregate of cash balances of expendable school funds in Virginia is relatively small. Anyone acquainted with educational financial administration in Virginia knows that this condition is not due to effective budgeting but to strained financial condition.

Virginia's Government Cost Payments for Education Compared with Payments for Other Major Functions of Government

In the preceding paragraphs, we have indicated the extent of the State government's support of education. The figures there presented are based on cash receipts and disbursements, but as far as possible, refunds, the receipts and disbursements of revolving funds, and other items that under the cash receipts and disbursements method of accounting go to swell both income and outgo have been eliminated. In the short time available, it is not possible to eliminate similar items from the figures of previous years.

In order, therefore, to produce fairly accurate figures for the year ended June 30, 1927, we have sacrificed a comparison with the transactions of previous years.

Comparable figures for government cost payments for the years 1913 to 1919, inclusive, and 1922 to 1926, inclusive, are available. These indicate that of the total disbursements of the State government for current operating and maintenance expenses, education and highways, which together now account for over fifty per cent of the total, received the following:

YEAR.	Education.	Highways.
1913.....	51.3 per cent.	6. per cent.
1915.....	46.3 per cent.	6.3 per cent.
1917.....	42.9 per cent.	5.3 per cent.
1919.....	40.8 per cent.	8.2 per cent.
1922.....	46.6 per cent.	12.3 per cent.
1923.....	38.5 per cent.	22.6 per cent.
1924.....	40.7 per cent.	20.9 per cent.
1925.....	44.6 per cent.	12.7 per cent.
1926.....	41.3 per cent.	16. per cent.

The Trend of Educational Cost Payments

Expressed in actual dollars and in terms of the 1913 dollar, the disbursements for education (including non-revenue and non-expensive items) were:

YEAR	Actual	In Terms of 1913 Dollar
1913	\$3,298,243.00	\$3,298,243.00
1915	3,512,021.00	3,477,248.00
1917	3,297,655.00	1,863,082.00
1919	3,861,289.00	1,874,412.00
1920*	4,915,730.00	1,862,729.00
1921*	6,003,160.00	4,083,762.00
1922	8,880,194.00	5,906,170.00
1923	7,963,673.00	5,171,210.00
1924	8,572,377.00	5,714,918.00
1925	8,774,947.00	5,518,835.00
1926	8,861,121.00	5,791,583.00

*Includes some capital outlay.

It will be seen that due to the war-time price inflations, the State's contributions to education were practically cut in half in the years 1917, 1919, 1920, and 1921, and that increase in the actual amounts appropriated came five years after the serious decrease in the purchasing power of the dollar. This undoubtedly in a large measure accounts for the strained financial condition of the educational system.

Additional comparison of cost payments for government service are presented in Statement VII.¹

Economic Data Respecting Virginia

There are three ways of considering the adequacy of the amount of support given to a governmental function: (1) By dealing in absolute terms with the needs of the function *per se* and measuring directly the extent to which there may be a failure to supply the needs; (2) by comparing the expenditures made with ability to spend; and (3) by drawing comparisons with the policies adopted in other jurisdictions.

The educational needs of Virginia have been gone into in the other nine parts of this survey and the conclusion reached is that there are many places where, to put it mildly, more money can be used. This finding will naturally call up such questions as: Can Virginia afford more? What do other States do?

It has been felt, therefore, that certain data should be brought together that will aid those so inclined in attempting to answer such questions. Population, wealth, income, savings, and certain types of expenditures will be considered.

Population

Population and its distribution is an indication of economic ability. In 1925, according to the United States census estimate, Virginia had a population of 2,503,000. Urban population has shown a steady increase. In 1900 the percentage of the population living in cities of twenty-five hundred or more was only 18.3 per cent of the total; in 1910 it was 23.1 per cent; in 1920, 29.2 per cent. In the decade 1910-1920, forty Virginia counties showed an actual decrease in population. Figures from the United States Census of Agriculture in 1925 give further evidence of the movement from farm to city. The number of persons living on farms in Virginia decreased from 46.1 per cent in 1920 to 39.4 per cent in 1925. It was also noted in the course of our survey that the average daily attendance for the year ended June 30, 1927, in city schools

¹Based on a table prepared by Dr. W. H. Stouffer, research associate, Institute of Research in the School Sciences, University of Virginia.

increased 5,326 over the previous school year, whereas there was a decrease of 5,979 in the case of county schools.

Wealth

The United States Census of Wealth, taken in 1922, estimates the total value of tangible wealth in Virginia for that year at \$4,862,633,000. This gave Virginia a ranking of nineteenth among the forty-eight States, and first among the eleven States located south of the Potomac and Ohio rivers and east of the Mississippi. Estimates of the tangible wealth of the States in 1925, based on a study of "National Wealth" by the National Industrial Conference Board* gave Virginia's wealth in that year as \$5,507,150,000. Virginia's rank among all the States was unchanged but among southern States, North Carolina has gone ahead of Virginia in total value of tangible wealth. While wealth is not a perfect measure of economic strength, it has been found to be a very fair index of taxpaying ability.

Income

A third measure of economic power is income. Estimates of income of the forty-eight States for three years, 1919, 1920, and 1921, prepared by the National Bureau of Economic Research† indicate that the average annual current income of Virginia for these years was \$948,905,000, giving it a rank of twenty-first among all States and second among the eleven southeastern States. The figures of income, brought down to 1926 by the National Bureau of Economic Research, show Virginia's yearly current income at \$1,264,516 with the same rank among the forty-eight States and the States of the southeast being surpassed by Georgia.

As to reliability of income as a measure of economic resources, the National Bureau of Economic Research says:

"Income is surely a good, if not the best, indication of economic welfare, and to know the income and distribution of income in a given section of the country is to be able to judge the approximate position in the scale of living of the bulk of its inhabitants."‡

Savings

A fourth measure of economic power of the people of a State is the amount of their accumulated savings. According to data furnished by the American Bankers' Association, Virginia, in 1924, had a total of \$208,329,000 in savings accounts, giving it eighteenth place among the States and first place among the States of the southeast.†

Luxuries

Still another index of economic ability is the amount expended for luxuries. The United States Treasury Department issued estimates for 1924 as to the amount expended for certain articles in the luxury class; namely, soft drinks, ice cream, theatres, candy, chewing gum, tobacco, jewelry, perfume, and cosmetics. Virginia's expenditures for these articles was estimated at \$66,264,000, giving it nineteenth place among the forty-eight States and first place among the States of the southeast.

Educational Obligations of Virginia, as Compared with Other States

Before discussing the ability of Virginia to support education, an estimate should be made of the size of its educational obligations, i. e., the number of

*See Research Bulletin of the National Education Association, No. 4, Vol. V, 1927.

†See Research Bulletin of the National Education Association, No. 1, Vol. V, 1927.

‡"Income in the United States," by Maurice Leven, National Bureau of Economic Research, 1925, p. 43.

children of school age, as compared with other States. There is a wide variation among the States in this respect—California, with 12.68 per cent of its population between the ages of six and thirteen, and South Carolina, with 21.67 per cent. Obviously, South Carolina's obligation is about twice that of California's. In a study made by Dr. John K. Norton, Director of Research of the National Education Association on "The Ability of the States to Support Education" (1926), the number of children aged six to thirteen was taken as a measure of the size of the educational task of any State. In this respect, Virginia, according to the United States Census of 1920, ranked fourteenth in the United States and eighth among southeastern States, with 19.08 per cent of its population between ages six to thirteen.

Virginia's Expenditures for Elementary and Secondary Education in Relation to Its Wealth, Income, and Other Measures of Ability

In 1923-1924, the latest year for which figures are available for national comparisons, Virginia expended for elementary and secondary schools, \$20,703,430.*

Measured by the various factors discussed above, Virginia's expenditures for public school education and her rank among the forty-eight States and among the eleven States of the southeast, appeared to be as follows:

	Percentage Relationship of Educational Expenditures to the Respective Factors	Virginia's Rank Among the 11 South- eastern States	Virginia's Rank Among the 48 States
Wealth	41.00 per cent.	10th	45th
Current income	2.18 per cent.	6th	36th
Savings	9.73 per cent.	11th	35th
Expenditures for luxuries....	30.59 per cent.	10th	35th

*See Research Bulletin of the National Education Association, Vol. V, No. 1, Jan., 1927.

CHAPTER LVII

VIRGINIA'S PRACTICES IN ADMINISTERING EDUCATIONAL FINANCES

To deal adequately with all that is involved in the administration of educational finances in Virginia is not within the scope of this report, neither has it been possible in the short space of time that could be devoted to educational finances, to attempt anything even approaching an appraisal of present practices. It is the purpose here to discuss only a few short-comings that have come to our attention.

The Inadequacy of the Present Accounting and Record Keeping Processes

The State Accountant, in his report entitled "Comparative Cost of Local Government—Virginia 1926-1927," page 5, says:

"On account of the varying methods of the boards of supervisors and school boards of the counties for financing the affairs of their respective counties, it is impossible to make a clear-cut division of either receipts or disbursements,"

and on page 6,

"A detailed classification of local expenditures from local funds in the counties cannot be had from the records of the county treasurers."

In these days so much criticism is being aimed at the receipts and disbursements basis of accounting that its defects as a tool of financial administration are well recognized. That the accounts of local school units are not maintained properly even on this basis, and that the management of local finances does not permit of the keeping of proper records of receipts and disbursements indicates the extremely unsatisfactory conditions that obtain. We believe, from the existing records, that the very best information that can be obtained as to the financial condition of the elementary and secondary educational system in Virginia, and as to the unit cost of operation, would be, at best, an estimate even after the most painstaking efforts.

The present form of annual report required from the division superintendents of schools is in many respects unsatisfactory, and as would be expected, in view of the condition of the local records, the information furnished through the annual reports leaves much to be desired. The reports are prepared by the division superintendents who are burdened with other duties and many of whom have no clerical assistants. The State Board of Education has not the facilities to extend to the division superintendents the assistance and advice that is needed if better records are to be maintained and significant reports prepared.

The present school report required by the State Board of Education is particularly unsatisfactory with respect to its provision for the classification of payments. The functional heads under which payments are reported conform to the standard classification generally used, but the allocation of elements of cost to the various headings is wrong, and as a result the figure produced for the so-called cost of instruction is merely the cost of teachers' salaries and is improperly compared with the costs of instruction in other jurisdictions, which includes educational supplies and the like.

The amounts and records of the State Board of Education are based on cash receipts and disbursements. Transfers, refunds, and other nonrevenue items are included in both the income and expenditures.

In Chapter LIII of this report it was pointed out that the present financial condition of the schools can be attributed largely to the decrease in the pur-

chasing power of the dollar and the State's delay in adjusting its finances to the changed economic condition. Another factor contributing to the unsatisfactory financial condition and the confusion which exists with regard to it, is the lack of proper and adequate records and reports. This is because the financial statements that are prepared obscure the facts and it is possible for conditions to exist that would not be tolerated were the facts known.

Accounting in the institutions of higher learning has also been on the cash receipts and disbursements basis. There appears to be an entire lack of any adequate audit of claims before they are paid. This situation, however, has been recognized and the State is now taking steps to effect improvements.

The Debts of the Elementary and Secondary Schools

In 1918 a law was enacted permitting school boards to borrow money for school items. In 1926 this law was repealed and the obtaining of loans for a shorter term than five years was prohibited. Bonds may be issued to provide funds for the erection of school buildings, when authorized by a majority vote of the qualified voters of the district proposing the issue. The law also provides that the aggregate amount of bonds issued and outstanding in any school district shall not exceed seventeen per cent of the aggregate assessed valuation of real estate located in the district.

The bonded and floating debts of the elementary and high school system amount to over \$10,000,000. Accurate figures are not available nor is it possible definitely to ascertain what proportion is floating. As of June 30, 1927, the county of Dickenson owed its teachers \$30,262.78. In the county of Arlington the per pupil cost of interest on school debts was \$14.86. The average per pupil cost of interest in all counties was \$1.70.

One of the recommendations elsewhere in this report suggests steps for a review of the debt situation in the counties and for the working out of improvements on the accounting and record keeping processes.

The Literary Fund

The literary fund was first established by law in 1810. The State constitution now provides that:

Section 134. Literary fund.—The General Assembly shall set apart as a permanent and perpetual literary fund, the present literary fund of the State; the proceeds of all public lands donated by Congress for public free school purposes; of all escheated property; of all waste and unappropriated lands; of all property accruing to the State by forfeiture, and all fines collected for offenses committed against the State, and such other sums as the General Assembly may appropriate.

Section 135. Appropriations for school purposes, school age.—The General Assembly shall apply the annual interest on the literary fund to the schools of the primary and grammar grades, for the equal benefit of all of the people of the State, to be apportioned on a basis of school population; the number of children between the ages of seven and twenty years in each school district to be the basis of such apportionment.

For the year ended June 30, 1927, the increments to the principal of the literary fund amounted to \$188,551.68, made up as follows:

Literary fund fines	\$184,742.39
Oyster fines	959.75
Waste and unappropriated land.....	802.27
Escheated bond deposits	2,047.27
 Total	 \$188,551.68

The income of the fund amounted to \$200,318.49. The condition of the fund, as of June 30, 1927, was as follows:

Literary fund principal:

Investment cash account	\$ 99,915.54
Bonds, act of February 14, 1882.....	868,000.00
Bonds, act of February 20, 1892.....	750,400.00
New London Academy, Certificate No. 15.....	6,500.00
Leesburg Academy, Certificate No. 5.....	2,500.00
Certificates State institutions of higher education....	815,000.00
Bonds for money lent to school districts.....	2,992,621.96
Long term and special election school bonds.....	130,166.61
Total	\$5,665,104.11

In the year ended June 30, 1927, the income of the literary fund apportioned to the schools constituted but .82 per cent of the total receipts of the elementary and secondary schools, and only 2.85 per cent of the State's total contribution to the schools.

When current funds are so urgently needed for the support of the free public schools, the wisdom of continuing to add to the principal of an endowment fund is questioned.

The receipts that are now added to the principal should be diverted for the immediate support of the schools.

The administration of the literary fund is now receiving attention and provision is being made for its better management and for adequate accounts and records.

CHAPTER LVIII

DIVISION OF EDUCATIONAL SUPPORT BETWEEN THE STATE AND LOCAL GOVERNMENTS OF VIRGINIA

In discussing the division of educational support between the State and local governments of Virginia, it is necessary to consider the fundamental responsibility of the Commonwealth. As a statement of this responsibility, the Constitution contains the following clause, couched in no unmistakable terms:

“The General Assembly shall establish and maintain an efficient system of free schools throughout the State.”

This alone established the Commonwealth's responsibility for education. In this respect, also, Virginia does not differ from the other States. In State constitutions, statutes, decisions of the higher courts, and the writings of eminent historians, there is reiteration of the State's position of responsibility for education.

Woodrow Wilson, in his book “The State,” summarized most effectively by these words, the position of the State in education:

“In one field the State would seem at first to usurp the family function, the field, namely, of education. But such is not in reality the case. Education is the proper office of the State for two reasons, both of which come within the principles we have been discussing. Popular education is necessary for the preservation of those conditions of freedom, political and social, which are indispensable to free individual developments. And, in the second place, no instrumentality less universal in its power and authority than government can secure popular education. In brief, in order to secure popular education the action of society as a whole is necessary; and popular education is indispensable to that equalization of the conditions of personal development which we have taken to be the proper object of society. . . .”

With the State's position of primary responsibility established, it becomes necessary to consider what this involves. One element involved is to be found in the creation of agencies of administration; a second in the determination of methods of procedure; and a third is to be noted in the fact that responsibility for education must ultimately carry with it responsibility for support.

Virginia has not chosen to provide for the administration of schools directly by the central State government. She has preferred rather wisely to delegate this administration to certain local units, the counties and the cities. Methods of administrative procedure have been determined in part by the statutes and in part by the evolution of varying local practices. Of particular concern, however, in this study is the way in which Virginia has met and is meeting her responsibility for the support of “an efficient system of free schools throughout the State.” What means are provided for the support of schools?

Virginia maintains her public schools by means of contributions directly from the State treasury and by the appropriations of local administrative units. The initiative in the matter of school support rests with the local unit. Administratively, the local unit is the division, made up of one or more counties or a city. Within the counties, however, revenue is derived both from the county and from subsidiary districts. For purposes of this report it will suffice to refer merely to the local unit, whatever it may be, and to refer to the support it gives as “local support” in contrast with “State support” given by the central State government.

In 1926-1927, the State's public elementary and secondary schools cost \$18,492,006.80 exclusive of capital outlays and debt service other than interest on obligations. This figure represents the current expenses.

Of this sum the State bore directly through appropriations \$5,415,361.97, or twenty-nine per cent.

That portion of the current expenses borne by the local units amounted to \$13,076,644.83 or seventy-one per cent.

The figures twenty-nine per cent and seventy-one per cent, respectively, represent the division of educational support for elementary and high schools between the State and the local governments.

Were Virginia's financial outlays for schools now adequate for providing an efficient system of schools, the State government's present percentage of contributions to the total school costs would be considered reasonable. To be sure, twenty-nine per cent of the local schools' costs, borne by the State, appears on its face to place Virginia in a favorable situation, as well as to cause her to rank reasonably high among the States in this respect. The trouble, however, rests in what appears to be the inadequacy of the total expenditures from the standpoint of securing an efficient system of schools. That present expenditures are inadequate to the securing of the desired efficiency seems to be a matter of fact to which the findings of the present as well as past surveys testify. The State government is contributing well in relation to Virginia's total school expenditures. The totals, however, as has been shown in other sections of this report, are inadequate; and these totals detract from the credit of a relatively satisfactory State contribution and point to the necessity of meeting more effectively the responsibility which is the Commonwealth's.

But there is a still more important consideration in this matter, and that is one of trends. Whither is Virginia going in this matter of the relative amount of school support to be assumed by the State?

In order to secure data on the trend of State participation over a period of years, we found it necessary to utilize past reports which included items of expense other than those upon which was based the computation shown above. The figure, twenty-nine per cent, in the previous paragraph, represents the percentage of current expense borne by the State; while to show trends at this point, the percentages, for lack of data similarly expressed, must be those of the complete costs for elementary and secondary schools, including capital outlay, debt service, and balances. The figures shown below are completely comparable, however, since the same basis has been employed for each of the years indicated.

Percentage of Total Elementary and Secondary School Costs Borne Directly by the State Government

(Including capital outlay, debt service, and balances.)

YEAR	Percentage
1910	33
1915	27
1920	24
1922	24
1924	22
1926	21
1927	21

From the above it is seen that since 1910 the relative proportion of the total school costs borne by the State has been rather steadily decreasing. In other words, the State government has not in its share been keeping pace with the gradually increasing school expenditures. This lag in Virginia is somewhat similar to that to be found until recently in many of the States. At the present, however, forward steps are being taken in many States to provide for more adequate direct State contributions to educational support. Notable examples of this movement for more effective State support are to be found in Alabama, North Carolina, Georgia, Maryland, California, New York, and Delaware.

For a State to decrease the percentage of direct financial participation in

school support is particularly dangerous at this time. Among the important reasons are these:

(1) Under modern economic organization wealth is tending to become centralized geographically. By the same process certain sections of the State are left poorer than before. This is a part of the urbanization movement. In 1900 only eighteen per cent of Virginia's population lived in cities, in 1910, twenty-three per cent, and in 1920, twenty-nine per cent. Similarly, in 1920 forty-six per cent of the population lived on farms, while in 1925 only thirty-nine per cent lived on farms. When the State decreases its financial support to education the burden is increasingly thrown upon local units with tremendously varying financial abilities. The great variation in the local taxable values behind each pupil in the several counties is exhibited and discussed in Chapter LVIII which follows. The financially able local units can provide good schools, while the very poor units are able to offer only an inferior education. This is the process which results from the decreased participation of a larger governmental unit such as the State.

(2) The present is a period of generally increasing educational costs. This increase has been brought about by the realization of a need for better schools and by certain economic conditions. For the State to fail to keep pace with the local units would seem to be contrary to the constitutional mandate for maintaining efficient schools. More seriously, however, such a trend needs to be watched by the State to the effect of the burden upon local units to whom has been delegated by the same State the initiative for educational provision.

(3) The present is a day of an increasing ease of communication with the resultant mobility of population. It, therefore, becomes the concern of the entire State to provide a sure education for the children of the State wherever they may reside.

Virginia, like most other States, has chosen to leave the local unit, the county, or city, the determination of the type and quality of the education which is to be offered. In other words, it has chosen to exercise its responsibility by delegating school maintenance. The Commonwealth is at liberty to pursue this course. If, on the other hand, the delegated local units, either by choice or financial inability, do not offer the requisite education for meeting the exigencies of life in a given day or age, the State is not absolved of its responsibility, in this case charged by a constitutional phrasing which speaks of an "efficient system of free schools." A responsibility not met by delegation still exists and it would seem to be the State's duty to see that further means are tried.

Several means of meeting responsibility still exist. One is by statutory requirement. But if the real difficulty in the situation rests in inadequate resources of many of the local units, statutory insistence alone will hardly suffice. Another means of meeting the responsibility for efficient schools is to be found in the acceptance by the State of a larger relative share in financing them. A combination of these two means will prove desirable. A larger direct financial participation by the State government, coupled with reasonable statutory demands upon local units, as to the form of educational provisions, personnel, and financial conditions seems not only wise but also essential.

Along with such measures must go something which will be discussed next, a more scientific method of State financial participation.

CHAPTER LIX

DISTRIBUTION OF STATE SUPPORT FOR SCHOOLS AMONG THE COUNTIES AND CITIES OF VIRGINIA

In the previous section, consideration was given to the division of school support between the central State government and the local administrative units. Trends toward a relatively smaller direct participation by the State government were shown and their implications discussed. Not only is it important to guard against throwing over on local units too large a portion of the financial support of schools, but it is of paramount importance to solve wisely the problem of the distribution of State school money. One may even say that it will be an undesirable business and educational step to increase the State's financial contributions until a better managerial policy for such contributions has been adopted by Virginia. When the State government distributes school moneys amounting to over five million dollars and thereby pays nearly thirty per cent of the current expenses of schools it is essential economy to see that sound principles of distribution are followed.

Amounts Now Distributed and Faults in the Present Method of Distribution

To the end that the present methods of distribution may be clearly in the mind of the reader, it will be well first to turn to an examination of them.

Virginia distributed to the counties and cities in 1926-1927, a total of \$5,415,361.97, there to be expended under the direction of the officially constituted boards. The accompanying table shows rather compactly the various distributions now in effect.

State Disbursements to Counties and Cities for Support of Local Schools
1926-1927

Item	Purpose	Amount	Percentage of Total State Aid
General Appropriation	Salaries of teachers.....	\$4,536,572.30	83.8%
High School Fund	Salaries of teachers.....	193,423.91	3.6%
Vocational Education	Salaries of teachers.....	199,448.04	3.7%
Vocational Equipment	Equipment	36,373.41	.7%
Rural Elementary Schools	Salaries of teachers.....	361,200.00	6.7%
Rural Supervision	Salaries of supervisors...	50,000.00	.9%
Rural Vacation Schools.....	Salaries of teachers.....	17,000.00	.3%
Physical Education	Salaries of directors.....	21,344.32	.4%
Salaries, 99.3%; other, .07%.			100.00%

For purposes of analysis it will be helpful to consider the present methods of distribution as of two types which we may call:

(1) The school census type—comprising the “general appropriation,” the first item in the table. Total amount \$4,536,572.30, or 83.8 per cent of the total distribution.

(2) The limited discretionary type—comprising all of the remaining distributions in the table. Total amount, \$878,789.68, or 16.2 per cent of the total distribution.

The school census type is as old as State support for schools. It is the product of a day of simple school conditions and one when no better method of distribution had been evolved either by research or experience. Fortunately, now we have both experience and research; and, while this type of distribution is found in several States, it is rapidly disappearing or being effectively covered in its defects by equalizing funds. Unfortunately, this method of distribution finds lodgement in the Constitution of Virginia, a fact which, as the Inglis Survey of Virginia pointed out, renders desirable and even essential a constitutional change.

The amount of the general appropriation, or the distribution characterized as the school census type, is determined by the amount which would be required by a ten and four cent local tax. This part of the appropriation amounted to \$3,537,463.18 in 1926-1927. To this was added a cash appropriation of \$999,-109.12, a part of which, amounting to \$194,169.74, may be accounted for by the income of the State permanent endowment fund.

The full amount as given above was distributed for the support of elementary schools alone in accordance with the terms of the Constitution, namely, in proportion to the school population. This population comprises all children between the ages of seven and twenty (seven to nineteen inclusive). Here, then, is a distribution amounting to over four and a half million dollars, about eighty-four per cent of all State support, and divided among the school divisions on an obsolete basis.

Briefly mentioned, the outstanding objections to this method of distribution are (1) the fact that it ignores completely the matter of attendance at school, (2) the fact that the payment is not dependent upon the educational need of the counties or cities, (3) its complete disregard for the relative financial ability of the various local units to support schools,* (4) its complete separation from any safeguards as to the efficiency of the local school systems, and (5) its disregard for factors over which the local unit may have no control, such as sparsity of population and the greater per pupil cost required for the maintenance of necessary small schools. And so on, *ad infinitum*. One might continue the enumeration of the ills of this basic method for the distribution of most of the State's school money. But Virginia must be familiar with the defects of this plan. These defects are thoroughly stated in Chapter XXI, Part One, Reports of the Education Commission and Survey Staff, in 1920.

If Virginia wishes a proper and helpful participation in educational support on the part of the State government, steps must be taken to remedy the defects inherent in the present basis of distribution. What these steps are will be indicated later.

By the term, the limited discretionary type, is meant a form of distribution wherein the State Board of Education is given some discretion as to the amounts of specific distributions and as to the standards to be met by the local units for purposes of qualification. The General Assembly, for example, makes an appropriation for the high school fund. Discretion in distribution, however, rests with the State Board, which draws up regulations containing certain standards to be met by local units for qualification. The same is substantially true of the rural elementary school and other distributions, with the exception that certain requirements of the Federal Board for Vocational Education have to be met in connection with the vocational education distribution.

If we exclude the distribution for vocational education, here is a sum of \$679,341.64 in the distribution of which the State Board of Education had discretion in the element of detailed regulation. The general purposes of the distribution of the various parts comprising this sum were specified in the appropriation bill.

The discretionary basis, within limits, is a desirable one and Virginia may well put it into further use. In so doing, however, the procedure for regulating payments by the State ought to be based upon thorough research carried on by the State Department of Education. It should be further pointed out that the procedure for distribution should be in keeping with well defined principles.

Conditions Establish the Need of an Improved Basis of Distribution

What are the conditions that indicate the need of an improved basis of distribution?

(1) The foregoing section deals with the defects of the present basis of distribution. These defects in themselves point to the need of a new basis.

*For variations in ability, assessable wealth per pupil, see Statement XXII appended.

(2) The State now distributes nearly five and a half millions of dollars annually. It seems that Virginia, as a State, must increase this appropriation if she is to provide efficient schools and keep pace with the rest of the States of the nation. But shall Virginia proceed in the matter of further State support by the use of antiquated and unscientific bases of distribution? If sound State policy be the rule, procedure on the present basis is impossible. Both the amounts of money now being distributed and the indications of need for further distribution appropriations argue strongly for improved bases. There is such a thing as sound business management in the distribution of State support to subsidiary units as well as in other undertakings.

(3) In the present bases of distribution there appears to be a lack of careful consideration for guiding principles. No principle other than the relief of local school support seems to be very dominant at the present time. There is some encouragement of effort under the high school and rural school distributions, but these are rather limited in scope. An all embracing principle in the distribution of support is needed and the lack of it constitutes a need for improving the present bases.

(4) Of basic importance, too, in the demand for a better basis of distributing State school money are the extreme variations in financial ability of the local county units to support education. Statement XXII, appended, shows for each county two very significant figures: First, the total assessed values per pupil, in average daily attendance, and second, county taxes assessed per pupil in average daily attendance. The significant point here is the extreme variations in these measures among the counties. The first of these two items represents the locally determined assessable wealth behind each pupil in school. Investigations of the State Tax Board in 1923, as, of course, is known, have shown that official real estate values are not only far from true values, but also greatly variable among the counties in the extent to which they approach fair market values. For example, the investigations showed that the average ratios of assessed values to sales values varied among the counties from 9.7 per cent to 64.1 per cent, with an average of 32.4 per cent.

Taking values as locally assessed, however, we find that these vary per pupil in average attendance from a low figure of \$545.00 in one county to \$7,551.00 in another. The other ninety-eight counties distribute themselves all along the way between these figures. Similarly, in county taxes assessed per pupil, the variation is from \$11.42 to \$116.60.* In the face of these figures, and making all due allowances, it must be admitted that these variations in assessable wealth behind each pupil have significant implications. Obviously, if the local units be left to themselves, the quality of the schools that can be maintained must vary tremendously. But this is more important. If the State school money is not distributed to local units with consideration to the ability of each to support its own schools, then this same State support also fails to improve the disparity in local ability. State school money is not distributed with relation to the ability of local units, hence the need for improved bases of distribution.

(5) Finally and most important, too, educational conditions in themselves demand for their remedy improved bases of participation in school support by the State government. State support should result not merely in relief of local burden, but also in the improvement and equalization of school conditions. Unless this result is attained, State support becomes merely a proof of over-taxation of local units and it must accept a non-dynamic role. Certainly, Virginia's school conditions must improve. The following financial measures of school conditions so argue:

(a) In current expenditures per pupil, Virginia ranked in 1925 forty-fifth among the States with a per pupil expenses of \$40.48 for elementary and high schools.

(b) The variations in per pupil current expenditures for elementary and high schools are so great as to indicate without question a tremendous

*Levies in addition are also in practice among the districts.

inequality of educational offering among the counties and cities. For 1926-1927, the range in these pupil costs for all current expenses among the counties was from \$11.56 at one extreme to \$75.89 at the other. The range among the cities was nearly as great, from \$33.28 to \$95.00.

(c) Instructional costs in Virginia consume approximately 75 per cent of the current school budget. The teacher is the key to the school, and yet with variations in average salaries of teachers of white schools from \$270.00 to \$1,007.00 and for colored schools from \$207.00 to \$805.00, what must be the disparity in educational offering?

(d) The length of the school year in days is another important measure of educational conditions. Here, as in the financial measures given, there is a great disparity among the offerings of the various counties. For white schools the average length of the school year in 1926 varied from 135 to 200 days, while in colored schools the variation was from 96 to 200 days. This disparity in offering for white schools alone was as great as thirteen weeks.

Other measures than those indicated above might be used to indicate still further that educational conditions and the need for their improvement demand the establishment of an improved basis for distributing State support. These measures, however, will suffice to point out the need of improved conditions. The old basis of distribution has been shown to be defective, to be unsound as methods for extending direct State participation in support, to be based upon no adequate consideration of underlying principles of State support, to be unconcerned with the relative local ability to support education, and perhaps most important, to have proved ineffective in assuring a reasonable equity of educational opportunity.

What, then, should be done in Virginia to improve the basis of State participation in the support of elementary and secondary education? Obviously, there is but one answer. The need is for a thorough-going research attack into the problem of financing education in Virginia. The very limited time at the disposal of the survey staff makes such a research attack here impossible. The problem is one for a more deliberate research.

An examination of the educational situation in Virginia—and it is the same in all States—will reveal many problems which can be solved only by research. Research is becoming increasingly recognized as the essential basis for policy building. Here is the need of policy building in the field of State school support. When so much is at stake neither snap judgments nor traditional ways of doing things will suffice. The State should make adequate provision in its State Department of Education for effectively prosecuting research into problems, the solutions of which are essential to policy determination. This will require a small staff trained and experienced in research. At times, owing to the specialized character of the research, special increments to the staff will prove desirable. One of the first problems thus attacked through an adequate research staff in the State Department may well be that of the financing of education. From the point of view of the Commonwealth the particular angle of approach to this problem will be that of the amount and method of direct participation in support of local schools by the State government. The results of such research will make available to the people of the State, and particularly to the Governor and the General Assembly, the facts so necessary to a determination of how State school money may be distributed most wisely.

A Suggestion of Principles for the Guidance of Research on the Problem of State Support

(1) The education of its youth is a responsibility of the State. Provision for the support of education likewise follows as a responsibility of the State. The method of provision is a matter for the General Assembly to determine. Some financial support may be delegated to local units, but some will be wisely borne directly by the State governmental unit.

(2) The function of the State in providing for the financial support of education should be to make provision, whereby every child may be assured an equity of educational opportunity. Another and more common way of expressing this idea is to say that the State should guarantee the equalization of a minimum educational opportunity. This does not mean that all children are expected to receive an equal education. Rather the term, as here considered, implies equivalent educational facilities. For example, the State, which is responsible, can hardly look with any more favor upon the education of the children in one local unit, county, or city, than in another.

(3) In the process of realizing an equalization of educational opportunity it becomes essential to measure the educational need of local units and, in sum total, of the State. This need expressed as a minimum becomes the educational task or the educational program for the offering, of which the State accepts responsibility. It is desirable to think of this need as a minimum program, which will vary from county to county or from city to city. These variations will be due to many factors, the most important of which will be the number of children to be educated. The measurement of need is the work of research. From this a minimum satisfactory program, in which the State is concerned in assuring to all, can be determined.

Heretofore the measurement of need has been the school population as determined by census. As has been indicated, the defects of this measure are legion.

Average daily attendance is a better measure. This, however, is inadequate, chiefly for two reasons: It fails to take into account, first, that it costs more to educate a pupil in a small school than a large one, and, second, that it costs more to educate a pupil in high than elementary school. Research will refine this measure so as to produce for Virginia a usable and meaningful measure of the educational need to be met.

(4) The financial task of offering the minimum satisfactory program in counties and cities will vary because of the differences in the size of the program in local units. Furthermore, as previously shown, the financial abilities of the local units to support the program will vary. It becomes necessary, therefore, in any plan of distribution to measure the ability of each local unit to support education. This, too, is a task for research and a very important one. When this has been done, the principle should become operative that local units participate in financing the satisfactory minimum program in proportion to their abilities.

(5) The State's direct financial participation in school support should be for the purpose of assuring to children in all local units, the benefits of a satisfactory minimum educational program. The size of the program will have much to do with the extent of the State's support. A graduated program, increasing over a period of years, will be most effective. The amount of the State's support for any given program in any given local unit should be in inverse proportion to the true financial ability per unit of demonstrated need in such local unit.

(6) Beyond the satisfactory minimum program in which the State government participates—and this is conceived as a safe minimum—any local unit should be free to make such further enriched offerings of diverse educational types as local pride and ability may warrant.

(7) The major proportion of the State government's support for elementary and secondary education determined through the application of the above principles should, therefore, go for the assurance of an equity of educational opportunity. If the States desires to use certain minor portions of its funds for the stimulation of new educational enterprises over and above the assurance of a minimum opportunity, it may set aside a limited amount, say 5 to 10 per cent, of its State support money for this purpose, the distribution to be contingent upon a stated excess appropriation by the local unit. Regulations for such distributions may well be left to the discretionary determination of the State Department of Education.

To whatever extent the State government goes in the provision of stimulation grants of money as here discussed, it should not lose sight of the fact that such appropriations always reduce the amounts available for raising the general level of the educational offering through the equalizing distribution.

Still further the State should not lose sight of its excellent opportunity for the stimulation and encouragement of progressive local offerings through another channel—namely, the very goodness of an educational leadership emanating from a professionalized State Department of Education.

CHAPTER LX

DIVISION OF VIRGINIA'S EDUCATIONAL EXPENDITURES AMONG ELEMENTARY SCHOOLS, HIGH SCHOOLS AND HIGHER INSTITUTIONS, AND BY CHARACTER, FUNCTIONS AND PURPOSES.

The grand total disbursements of the public, elementary, and high schools, and of the higher institutions supported in part by the State, is distributed as follows:

Elementary and high schools	\$23,660,350.00
(The State government pays \$7,081,829.81 of this total.)	
Institutions of higher education	5,897,337.62
(The State government contributes \$1,550,575.54 of this amount.)	

The total disbursements of the institutions of higher learning were as follows:

INSTITUTION	Amount	Per Cent to Total
William and Mary College	\$1,114,355.73	18.90
University of Virginia	1,203,094.96	20.49
Virginia Agricultural and Mechanical College and Polytechnic Institute	825,644.08	14.00
Virginia Military Institute	731,419.64	12.40
Medical College of Virginia	213,142.03	3.60
State Teachers Colleges	1,471,112.98	24.95
Farmville	\$482,824.00	52.82
Fredericksburg	258,521.24	17.57
Harrisonburg	433,354.90	29.46
Radford	296,412.84	20.15
	100.00	
Virginia Normal and Industrial Institute	333,568.20	5.65
	\$5,897,337.62	100.00

On the school reports submitted to the State Superintendent of Public Instruction, the disbursements of the elementary and high schools are not segregated. In order, therefore, to arrive at the distribution of the payments for expenses of the elementary and secondary schools, it was necessary to resort to statistical methods. But there is no short cut and no possible means of arriving at even an estimate of the amounts of capital outlays and payments on debts of the elementary and high schools, respectively. Elsewhere in this report it is pointed out that the classification of cost payments on the school reports submitted by the division superintendents is inaccurate. Before any distribution could be worked out it was, therefore, necessary to reclassify the payments reported. The formula* used for the distribution of current expenses was as follows:

$$\text{Total current expenses for schools} \times \frac{\text{Elementary teachers' salaries}}{\text{Total teachers' salaries}} = \text{Total current expenses for elementary schools.}$$

The total expenditures of the elementary and high schools amounted to

*See Elementary School Costs in the State of New York, the Educational Finance Inquiry Commission, 1924.

\$23,660,350.00. Of this amount 78.16 per cent, or \$18,494,066.84, was current expenses, which was distributed as follows:

	Per Cent
Administration	7.21
Instruction	74.15
Auxiliary agencies .....	.94
Coordinating activities	3.85
Operation of plant	6.80
Maintenance of plant and equipment	3.94
Interest on debts	3.11
Total	100.00

These amounts were distributed between the elementary and high schools as follows:

	Elementary Schools	High Schools
Administration	\$ 910,631.05	\$ 423,236.02
Instruction	9,363,411.99	4,349,845.66
Auxiliary agencies	118,544.08	55,070.56
Coordinating activities	486,388.44	225,955.49
Operation of plant	858,901.28	399,193.46
Maintenance of plant and equipment	497,423.62	231,081.98
Debt service	392,188.93	182,194.39
	<hr/>	<hr/>
	\$12,627,489.28	\$5,866,577.56

The detailed statements numbered XII to XXI classify the disbursements of each of the institutions of higher education by function, by character and by object, or by commodities and services purchased. They cannot very well be summarized.

Statement XI presents an analysis of elementary and high school costs by county and city and by character, and shows the per pupil cost of current expenses. It should be noted that commissions paid to county treasurers for handling school funds are included as cost payments of the educational system because they are that in fact. The total commissions amounted to \$302,875.04 and are included as an administrative expense. This makes the percentage of current expenses devoted to administration rather high. Of a total current expense 7.21 per cent is for administration, but omitting the commissions of the county treasurers, or treating them as a deduction from receipts, administrative expenses would be materially reduced.

It should be noted that interest payments are included in current expenses. Interest is a current operating expense and should be so treated.

The disbursements of the educational system are classified by character as follows:

Total:

Current expenses	\$22,934,759.30
Capital outlay	4,775,927.65
Redemption of debt	1,847,000.67
	<hr/>
	\$29,557,687.62

Elementary and High Schools:

Current expenses	\$18,494,066.84
Elementary schools	\$12,627,489.28
High schools	5,866,577.56
Capital outlay	3,319,282.49
Redemption of debt	1,847,000.67
	<hr/>
	\$23,660,350.00

Institutions of Higher Education:

Current expenses	\$4,440,692.46
Capital outlay	1,456,645.16
	<hr/> \$5,897,337.62

In the elementary and secondary schools, the State's contribution of \$5,531,-254.27 was 29.91 per cent of the total current expenses to which it is devoted. The above tables, in connection with State aid, lend themselves to many computations in determining the management of the State's educational finances.

CHAPTER LXI

THE EFFECTIVENESS OF EDUCATIONAL EXPENDITURES IN VIRGINIA AND SUGGESTIONS AS TO AN EXPENDITURE POLICY

In a communication to the General Assembly on March 21, 1927, Governor Byrd said: ". . . I believe that the State can and should at the 1928 General Assembly increase its appropriation for the maintenance of the public schools as a relief to the local school taxation. But the public should be satisfied that the dollars now available are well spent, economically spent, before additional dollars are appropriated." At the close of this same communication, the Governor said: "Ways and means will be found, I hope, to meet their (the schools) essential and reasonable requirements once we may understand clearly what these requirements are, and that the funds appropriated will be expended with efficiency and economy."

This is a very clear expression of a point of view among citizens and taxpayers and officials not in the ranks of the educational organization that has been encountered again and again in the course of this study. It is apparently the keynote of the whole inquiry.

It calls imperatively for an answer to two questions: (1) Is the money now given to education well used, and (2) what assurance is there that if larger sums are given they will be effectively spent? Let us see what can and what cannot be said from the angle of a financial inquiry on these two subjects.

Effectiveness of Present Expenditures

While the question of the effectiveness of present expenditures has, of course, to do with money, it obviously cannot be answered by an inquiry dealing with financial facts alone. How effectively school money is employed depends, of course, upon the efficiency of the educational organization. "Efficiency" is a ratio. In an educational enterprise, just as in any other project aimed at the securing of a desired result, it is the ratio between the returns and results secured and the money spent. Both numerator and denominator need to be known. The denominator is supplied in the figures given in this section of the report showing the amounts of money spent for various services and purposes in the operation of the various parts and activities of the educational system (although not in the degree of detail desired by the undersigned) but the other sections of the report must supply the numerator, *i. e.*, what the people are receiving in return. Not that anyone can say quantitatively just what values education creates—they are too subtle, far reaching, and complex to be reducible to terms of dollars and cents. But from an analysis of the organization and the functioning of the system an opinion or estimate can be formed of its ability to produce results in fair proportion to the expenditures it involves. Such opinion is expressed in the other sections of this survey report.

It is understood, of course, that in the foregoing discussion the assumption is made that all moneys allotted to education reach the educational administrative authorities and that the wastes and leaks occasionally alleged are those inherent in an imperfect educational machine. It is, of course, probable that here and there more or less serious leaks may develop as a result of a loose system of transmitting, administering, and accounting for moneys. Obviously nothing short of an audit will uncover the extent of such losses. While much can be done in improving the State's accounting system to reduce the possibility of such leaks, it is being done now by the financial authorities of the State. The situation in the counties is bad, however, and the State should aid the local authorities in the outlining of an adequate record-keeping system for financial transactions.

A mere inspection of certain unit figures that appear in the appended financial tables makes it clear that there is only limited "room" for appreciable waste in what is now being spent on elementary and high-school education and that the real question here is more likely to be one of whether the educational work done is adequate than of whether it is over-expensive.

Statement XI appended hereto, giving figures on educational disbursements in Virginia for the year 1926-1927, indicates an average per pupil cost of current school expenses of \$43.53. The unit figures are shown by cities and counties. For counties the average was \$37.08 per pupil, for cities \$61.57. The per pupil costs in Virginia counties ranged from \$11.56 in Scott county to \$75.89 in Arlington county. Six Virginia counties expended for current educational expenses less than \$20.00 per pupil; only three were more than \$60.00 per pupil. For cities, the expenditures ranged from \$33.28 in Radford to \$95.00 in the city of Winchester.

The Insuring of Effectiveness in Future Expenditures

We may now pass to a consideration of the second question asked above. It involves the second feature of the financial policy indicated in the quoted message of the Governor, namely, that larger appropriations wait on assurances of a high ratio of return in educational service.

Let us approach this proposition logically. If more money is to wait on more efficiency then the improvement in efficiency must come first. And how can the degree of efficiency attained by the educational organization be increased? How can the ratio of return per dollar be raised?

The return can be increased only as a result of many contributing improvements in all of the factors of educational "management." It must result from wise policies, sound organization, capable supervision, competent teaching personnel, effective instructional methods, adequate plant, and continuous research and counsel that will translate experience into betterment. Who is to make these improvements? On what do they in their turn depend? Largely on the personnel of the educational forces. Largely on the leadership of the State's educational officials. Outside advice and the occasional stimulus of a survey such as the one to which these remarks are appended may help but they cannot alone bring about any permanent or material improvement. That must come from within.

But if there is to be no provision for additional staffs at the crucial points in the organization, or for higher salary levels to attract men and women of ability to the work and to hold those who are now most useful (and hence most in outside demand), then will there be any change in the conditions or in the rate of improvement in educational administration and in teaching results? It would seem to us to be clear that there will not, and that the State must start by making some such provision first, and by making it so wisely that it can have faith that the results will follow to justify the start and the extension of the support. Otherwise, a perpetual impasse will be maintained.

This line of reasoning leads us to a definite recommendation as to what Virginia's educational expenditure policy should be.

Educational Expenditure Policy Recommended for Virginia

Proceeding on the assumption (which the other sections of this general report have developed into a fact) that Virginia needs to devote more money to its educational system, we offer the following recommendations as to what the State government should do. It would be futile to attempt, at this point, to make any suggestions as to what the local units should do, as there will be not far from 123 situations to be dealt with in the one hundred counties and twenty-three cities.

However, the central State government can and should aid and counsel the local units in a practical way with respect to their problems of finance and taxation. It is believed that the State should, for example, do everything

possible to induce and aid the counties and cities to bring their assessed valuations up to fair values in order that full local ability to meet school costs may be known and utilized. It is also believed that it would be highly desirable, at this time, for the State government to take the initiative (obviously no individual county or city can do it) in instituting and organizing an inquiry into the financial condition and difficulties of each and every county and city school system, and as a result of its findings and its consideration of the local problems to develop: (1) Specific suggestions for each unit for meeting its present problem, (2) a general plan for dealing with the local debt situation, and (3) a uniform system of records and accounts for the recording of local financial transactions, the portrayal of current financial conditions, and the reporting of financial operations.

Now with respect to the expenditures out of the State's general treasury, it is proposed the State government progressively increase the amount given to the support of elementary and secondary schools, both in relation to the support given locally and in absolute figures. It is urged, however, that this policy of gradual increase be applied according to a carefully worked out long term expenditure plan (subject to amendment from year to year).

It is recommended, and this is the very essence of the whole proposal as to financial policy, that in working out the financial plan for allotting additional moneys, one fundamental principle be adhered to, this guiding principle to be that the additional sums appropriated out of the State treasury from time to time be allotted to the strengthening of certain elements in the entire educational system of the State in the order of the importance of the bearing that these elements have on the effectiveness of the whole system. That is to say, those functions and activities that are likely to have the most far reaching beneficial effect on the whole work of education should have first attention.

In our opinion, it would also be wise to provide that the actual giving of the additional support proposed in the plan of finance policy be contingent upon an affirmative showing of increased effectiveness resulting from the previously granted increases. Obviously, it would not be practical to attempt to enforce this requirement unless provision were made for adequate records as to classified expenditures, attendance, unit costs and the other significant statistical indices of progress and economy. It may be said at this point that unquestionably the educational authorities should in any case be provided with this aid.

It is probably somewhat outside of the brief of the authors of this section of the report to make any suggestions in detail as to what elements are considered to be most important under the application of the principles advocated above and, therefore, deserving of first attention in the allowance of additional appropriations. However, to make the point clear, it may be said that a reorganized and strengthened staff for the State Board of Education, as the administrative nucleus of the State's Department of Education, is certainly in a position to bring more value for each dollar spent on it than any other element. An additional (say) \$100,000.00 appropriated for the development of this agency would have an influence in the application of every one of the twenty-one million dollars spent by the people for education.

But a discussion of the way in which it is believed that additional appropriations might well be applied in the earlier years, at least, of the operation of such a policy as has been proposed would not be in order here. The point that we wish to make is that if the desideratum in the decision as to whether more money is to be allotted to education or not is to be "certainty of greater efficiency," then these additional expenditures should be made at a place, for a purpose, and in a way to promote efficiency.

CHAPTER LXII

TEACHERS' SALARIES IN THE VIRGINIA PUBLIC SCHOOLS

Introductory

The problem of public school teachers' salaries is of importance, not only because of the total amount of money involved, but because of the effect of the salary level on the morale of the profession. Discussions of teachers' salaries commonly assume in advance that teachers are underpaid, and that immediate salary increases will automatically and promptly bring the teaching profession to a higher level. It is easy to produce figures, charts, and graphs proving that teachers are generally underpaid, and that the teachers of a particular State are worse off than in neighboring States. Such comparisons are often grossly misleading, however, and most of them are beside the point. We should like, without minimizing in any way the importance of the teaching profession to treat the problem of teachers' salaries much as any other salary problem would be treated. Such a discussion would involve answering the following questions:

- (1) Are Virginia teachers, particularly in rural schools, receiving approximately a fair rate for service rendered?
- (2) Is the State of Virginia getting the kind of teachers and the quality of teaching it should have for the money expended?
- (3) What effect, if any, would salary increases have on the supply and quality of the teaching personnel?

In Virginia the compensation problem, as well as most other educational problems, relates largely to the rural schools. Salaries in the city schools of Virginia rank rather favorably with those of other States. This discussion, therefore, will deal mostly with the conditions in the county schools.

How Are Teachers' Salaries Determined and How Are Teachers Paid?

Before discussing the actual salary rates in effect, let us look at the general matter of salary administration, which includes the manner of determining salaries; provisions for increases and promotions; the effect of living costs; the pension system and other factors bearing on the rate of compensation, and the method of actually paying the teachers.

How are salary rates determined? Although the State contributes approximately half of the money expended on salaries of public school teachers, it has no direct control over salary rates, except in the case of the accredited high schools and the standard elementary schools, where certain minimum salary standards must be met.

To be on the accredited list, a high school must, among other requirements, pay each of its teachers a minimum of \$100.00 a month for a nine month term. Rural elementary schools, to meet the requirement of standardization, must pay a minimum salary of \$85.00 a month for a nine month term to each teacher. This standard, which was set up some years ago, has been found to be impossible to maintain and an amendment to the regulations of the State Board of Education in 1924 permits the Department of Education to lower this minimum salary under certain conditions. For elementary schools the minimum is now in actual practice \$70.00 a month.

There is no such thing as a State wide salary schedule for the public schools of Virginia nor any minimum salary except in the case of accredited schools. Salary rates are determined by the local school boards. If the division superintendent is influential and aggressive he may practically decide up to a certain point what the salaries shall be within the county. To some extent the State Board of Education may influence the fixing of salaries by raising the qualifications required for different kinds of teachers' certificates. The board might thus create a small

supply of teachers and to some extent cause an upward movement to salaries. What has been done in this way has had no appreciable effect in raising the level of teachers' compensation thus far.

The actual fixing of salary rates is an arbitrary and widely varying matter. Salary schedules exist in only a few counties of the State. These are seldom definite and are in no way binding upon the board. The general practice in salary fixing is an informal understanding that salary rates for the various schools in the county are about so much. These are based on the salaries paid in the preceding years and are affected by the cost of living, the supply of teachers, and, of course, ultimately by the resources of the district and the local tax rates. In many cases salaries are so low that it is practically necessary to employ local residents.

In the absence of definite salary schedules the matter of salary increases and promotions is entirely within the discretion of the local board. Such increases as are made are usually based on length of service.

Teachers are selected by the local boards from lists furnished by the division superintendent. Usually the superintendent indicates the teachers who are to be appointed and the action of the board is purely formal. The teacher signs a contract which obligates her to keep the school open a certain number of hours a day during the term. It does not give the teacher any very great advantage. She may be transferred at any time from one school to another by the superintendent. Special covenants are sometimes attached to the contract providing for shortening the school term in case funds are exhausted. During the war when the supply of teachers was low it became a rather common practice for teachers to jump their contracts and at the last moment to go to some other school for higher salaries. The State Board of Education was forced to make a regulation that a teacher who broke her contract would have her certificate revoked. It is fair to say, however, that this has seldom been done, it being generally agreed that if a teacher can get a higher salary she is entitled to it.

Salary rates in the various localities are, of course, affected by the local cost and standards of living. No direct data have ever been gathered as to the variation in living cost of the different sections of Virginia, but it is a matter of common knowledge that in certain rural districts board and room may be obtained at half the rates prevailing in other sections.

How Are Teachers Actually Paid?

The teacher's contract provides that he or she shall be paid the salary agreed upon on the last day of each school or calendar month or as soon thereafter as possible. The actual salary rates of teachers do not always tell the whole story. No complete data are available to show in how many cases the salary payments are delayed because of shortage of funds or other causes. Cases have been brought to our attention in which the teacher did not receive her salary for several months. Local citizen organizations frequently raise money themselves to pay teachers' salaries when the school funds are inadequate. During the past year the Virginia Cooperative Educational Association reports that thirty-six of its local affiliated bodies raised funds for the support of schools. This happens less frequently than it did a few years ago. This is due in part to the improved status of teaching. When local residents without high qualifications were employed the board was not so much concerned if the school had to close down for lack of funds. When outside teachers are employed there is more anxiety on the part of the local authorities to keep the school running the full term.

One per cent monthly is deducted from each teacher's salary for the retirement fund, established by law. To this fund the State appropriates about \$10,000 annually. The law provides for retirement for old age at the age of fifty-eight for a man and fifty for a woman teacher after thirty years service. Teachers may be retired for disability at any time after twenty years service. The annuity is one-half the average salary of the last five years taught, but it cannot exceed \$500. For this promise of protection teachers pay twelve times as much as the State contributes. The fund is not on an actuarial basis, the pension is

inadequate, and no provision is made for payments in case of death or withdrawal. During the year 1926-1927, 101 teachers were retired for old age and for disability. These small benefits make the retirement fund an insignificant factor in the compensation of public school teachers.

What Salaries do Virginia Public School Teachers Receive?

Virginia public school teachers in 1926-1927 received in salaries approximately \$13,000,000, distributed among the following classes of teachers:

	High Schools	Elementary Schools	Evening and Part Time	All Teachers
Counties:				
White	1,930	8,022	.....	9,952
Negro	75	2,759	.....	2,834
Cities:				
White	947	2,039	279	3,265
Negro	143	754	114	1,011
Total	3,095	13,574	393	17,062

Reports furnished the State Superintendent of Public Instruction do not show the actual number of teachers employed at various salary rates, but only the maximum, minimum, and average salaries paid within the division for different grades of teachers. Average salaries do not give as satisfactory a picture of the actual compensation of teachers as median salaries would give, but in the absence of figures showing the distribution of salaries, the following facts as to averages, maximum and minimum salaries paid in 1926-27 give a fair indication of what Virginia public school teachers receive:

Elementary school teachers (white), average	\$ 723
Elementary school teachers (negro), average	405
All elementary school teachers, average	620
High school teachers (white), average	1,225
High school teachers (negro), average	784
All high school teachers, average	1,175
Average salary—all public school teachers	797

Leaving out the school systems of the twenty-three Virginia cities we get the following averages for the county schools alone:

Elementary school teachers (white)	\$ 635
Elementary school teachers (negro)	340
All elementary school teachers	533
High school teachers (white)	1,153
High school teachers (negro)	715
All high school teachers	1,119
Average salary of county school teachers	643

Examination of maximum, minimum, and average salary rates will show striking variations in the salaries of teachers in the various counties of the State. The average salaries of elementary school teachers range from \$290 a year in Montgomery county to \$975 in Arlington county. Still greater extremes will be found as between white and negro teachers. The average salary of negro elementary teachers in Patrick county was \$200 a year as contrasted with average salary of white elementary teachers in Princess Anne county of \$1,007. If we take the minimum and maximum salaries of elementary school teachers, we find a range of salaries from \$150 a year (the minimum for negro elementary teachers in Buckingham county) to \$2,400 a year in Elizabeth City county.

That these extremely low salaries are not isolated instances is indicated by the following table showing the number of counties paying various average rates of salary.

SALARY GROUPS	COUNTIES				CITIES			
	ELEMENTARY		HIGH SCHOOLS		ELEMENTARY		HIGH SCHOOLS	
	White	Negro	White	Negro	White	Negro	White	Negro
Under \$300	1	35						
\$300-349	1	21						
\$350-399	1	18						
\$400-449	4	7						
\$450-499	7	8						
\$500-549	16	2						
\$550-599	15							
\$600-649	11	2						
\$650-699	14	1						
\$700-749	7							
\$750-799	7		2	6				
\$800-849	5		1	2				
\$850-899	4		1	3				
\$900-949	2		2	6				
\$1,000-1,049	2		5					
\$950-999	1		9					
\$1,050-1,149			14					
\$1,150-1,199			11					
\$1,200-1,249			15					
\$1,200-1,249			13					
\$1,250-1,299			7					
\$1,300-1,349			4					
\$1,350-1,399			4					
\$1,400-1,449			2					
\$1,450-1,499			3					
\$1,500-1,549								
Over \$1,550			2				10	

It will be noted that in fourteen counties of the State the average salary of white elementary teachers was less than \$500.00, while in thirty-five counties the average salary of Negro elementary teachers was less than \$300.00 a year.

Adequacy of Salaries in Virginia Public Schools

Comparisons of teachers' salaries in Virginia with those in other States or for the nation as a whole have not been gone into because such comparisons fail to show differences in wealth, income, distribution of population, the character of the occupations, and many other local factors.

Comparisons of teachers' salaries with the salaries and wages of other occupations in Virginia would be somewhat more enlightening. It might be pointed out, for example, that the average wages of certain types of unionized labor have doubled since 1917; that the average salary of stenographic and secretarial employees of the State government, according to the personnel survey made in 1925, was \$1,249.00; and possibly that teachers' salaries have increased more slowly than any other class of employees for which statistics are available. But none of these comparisons help us much in judging the adequacy of teachers' salaries. Most of the salary and wage-earning graphs for which we have data are city workers, while as we have seen, the teachers' salary problem in Virginia is largely a rural problem.

The trend of public school teachers' salaries in Virginia is shown in the following table giving average salaries for certain years since 1915. These salaries have been translated in terms of the purchasing power of the dollar, using the price index calculated by the United States Bureau of Labor statistics, which takes the 1913 dollar as standard:

Average Salaries of Virginia Public School Teachers Since 1920 in Terms of the 1913 Dollar

Year	Average Salary of all Public School Teachers in Virginia	Purchasing Power of Dollar	Actual Average Salary
1915.....	\$340	\$.95	\$323
1920.....	560	.48	269
1921.....			
1922.....	722	.60	433
1923.....			
1924.....	746	.59	440
1925.....	766	.57	437
1926.....	772	.57	440
1927.....	797	.57	454

The same objection may be made to a comparison of teachers' salaries with the increase in the cost of living that is made to a comparison with other occupations. The price indices prepared by the United States Bureau of Labor statistics, as well as most other figures, showing increases in living costs and decreases in the purchasing power of the dollar, are based on prices in cities. For many teachers in Virginia, however, the salary rates of 1927 represent a smaller purchasing power than those of 1913. No authoritative study has ever been made of living costs in rural Virginia. It is a matter of common knowledge that living costs vary widely in different parts of the State. In 1923 twelve hundred teachers attending the summer session of the Radford Normal School were asked a number of questions about costs of living. The amount paid for board ranged from \$8.00 to \$40.00 a month, the average being \$18.11. The amount spent for laundry averaged \$6.00 for the term. Forty per cent of the teachers replying reported that they did their own laundry. The average amount paid for dentists, doctors, and medicine was \$23.16 for the term. Teachers paid out of their own pockets for school supplies, such as chalk, children's materials, and for janitor service an average of \$6.75. Sixty per cent of the teachers questioned said they would have none of their savings of the previous year left in September and would have to borrow money to return to their schools. A questionnaire study made during the present survey by the staff considering the high schools indicated a median amount for board, room, and transportation for 1,150 high school teachers of \$32.40 a month, on a median salary of \$118.83 a month.

A fairer comparison would be between the income of rural school teachers and that of other professional people in the community. In many places the local teacher stands on a par with the doctor, the lawyer, and the minister. In other places, she may be compared with the librarian or the nurse. Accurate information as to the income of these professions is lacking. In some rural communities where very little cash is seen by any one, it may be that the rural teacher who lives at home or with relatives and draws a regular monthly salary, small as it may be, has an economic standing comparable to other local professional people.

Effect of Virginia's Compensation Policy on the Quality and Quantity of Teachers

Does the salary policy described above give the State the proper kind of teachers in sufficient numbers? A satisfactory answer to this question would require (1) a knowledge of what kind of teachers the State wants, (2) some means of measuring the efficiency of its present teaching force by that standard. In the absence of exact knowledge as to what kind of teachers Virginia wants, we must proceed on the general assumption that as to education generally, the State wants, first, to provide equal educational opportunity for all children regardless of where they live and then steadily to raise the standard of all public school instruction. In the absence of any definite measurement of teaching ability we can use only the most obvious standard, namely, the supply of reasonably well qualified teachers.

The supply of public school teachers in Virginia is controlled by the number of certificates issued by the State Board of Education, and this is controlled

largely by the number of persons taking teacher training courses in the four State normal schools and the State institutions of higher learning. The State Board of Education has discretion in determining what kind of certificates shall be required for different classes of schools, and to whom certificates may be granted. A few years ago Virginia issued more different kinds of certificates than any other State. At one time thirty-four different types of certificates were recognized. Recently, the State Board of Education has reduced the number of regular certificates to six, and has adopted a policy of discouraging the granting of lower grade certificates. The success of this policy is indicated by the comparative statement of new certificates issued year by year since 1917-1918, which appears in the printed report of the Superintendent of Public Instruction. The number of new certificates issued above first grade shows a steady increase from 33.4 per cent in 1917-1918 to 50.27 per cent in 1925-26. During the past year the percentage of higher grade certificates issued was 58.16 per cent of the total number issued. Despite the reduction in the number of lower grade certificates issued, the supply of better qualified teachers still exceeds the demand, and in the past year, the State Board has ruled that on and after September 1, 1929, the minimum qualification for persons beginning to teach in accredited high schools shall be graduation from a standard four year college. On and after July 1, 1931, the elementary certificate, requiring at least one year of professional training of college or normal school grade will constitute the minimum legal license for teachers in the elementary grades.

The fact that the supply of teachers is adequate and that the quality as measured by educational attainments has steadily improved, does not tell the whole story. How many of these candidates with higher grade certificates are actually employed in Virginia public schools? How long do they remain? What becomes of those who are not employed within the State? Exact information on these points is lacking, but the difference between the numbers of higher grade certificates issued and the number of teachers with corresponding certificates contracted for each year in Virginia schools indicates that there is a considerable number of potential teachers of high grade lost to Virginia. In 1926-1927 the Superintendent of Public Instruction reported that "such information as has been received justifies the conclusion that Virginia is training many more teachers for nearby States than those States are training for Virginia. There can be no doubt that the higher salaries paid in adjoining States is causing a large number of Virginia teachers to choose these States for fields of service."

Some indication of the effect of Virginia's compensation policy on the teaching personnel may be gathered from figures on the tenure of teachers and the annual turn-over. Here again exact information is lacking since no complete study of turn-over has ever been made. From reports furnished the Superintendent of Public Instruction for the year 1926-1927, it appears that thirty-six per cent of teachers in rural elementary schools had less than three years experience. The number of teachers with less than two years experience was approximately twenty-five per cent; the number with less than one year of experience was thirteen per cent. This indicates a rather high percentage of inexperienced teachers. This is not necessarily a sign of weakness, since experience is not always an indication of teaching ability.

The report of the Superintendent of Public Instruction also shows the number of teachers who are teaching in the division for the first time. This number includes both beginning teachers and those who have come in from other divisions or States. For 1926-1927, the number of teachers in the division for the first time was about twenty-four per cent of the total number of teachers. This is a fair indication of the annual turn-over for the State as a whole. It does not show the rate of turn-over among different classes of teachers. Nor the differences between various school divisions in this respect. From such information as we have, however, the teaching force appears to be more unstable than is desirable.

A comprehensive study of turn-over which would reveal the number of teachers leaving the State, the number coming in from other States, the number going into other occupations, the number entering teaching from other occupations, and reasons for these changes would throw much needed light on the economic status of Virginia's public school teachers.

Summary of Findings and Conclusions in the Matter of Teachers' Salaries

(1) The general level of teachers' salaries in rural Virginia is low, and the rate of increase in the past ten years has been slower than in most occupations. It is only because of the lower living costs in rural districts, the dignity and prestige which the profession has always enjoyed in the State, the absence of commercial standards, and the genuine devotion of teachers to their work, that it has been possible to get the service that has been secured. The fact is that many qualified teachers receive salaries which are hardly adequate for a decent living.

(2) The wide variation in rates of pay among teachers performing similar tasks, having similar responsibilities and in many cases having similar qualifications is a condition which cannot be justified. The elementary teacher with two years normal school training may, if she is very fortunate, get a salary of \$100 a month. If she is not so fortunate she will be compelled to take a school for \$50 or \$60 a month. The injustice of the situation lies in the fact that the variations in salary do not depend upon the ability and qualifications of the teacher. To a great extent the fixing of salary rates is a matter of individual bargaining and of chance. Delays in the paying of salaries, uncertainty of advancement, the lack of an adequate retirement system, and other factors will discourage the best qualified young people from entering the teaching profession.

(3) Such data as are available on the turn-over of public school teachers indicate that the salary situation has a marked undesirable effect on length of service and the stability of the teaching profession in Virginia.

(4) The supply of public school teachers produced by the four State teachers colleges and three of the higher institutions of the State has in the past greatly exceeded the demands of Virginia schools. This surplus has been partly utilized by neighboring States having higher salary schedules. To a considerable extent, however, the over-supply has increased competition and has kept down salary rates. The present policy of the Board of Education in reducing the number of certificates issued and raising the requirements for elementary and high school teachers will tend to have the opposite effect and local school authorities will be forced to pay higher salaries or close their schools.

(5) The present policy of the State Board of Education in urging standardization of rural schools and in raising the educational requirements of teachers will tend to raise the level of teachers' compensation, but it will also bring to an issue the problem of the poorer local schools which simply cannot pay adequate salaries. This leads us directly back to the problem of how to assist the financially weak counties in providing adequate education that has been dealt with in considerable detail elsewhere in the report to which this discussion is appended.

(6) The foregoing observations bear on the fact that the public school teachers of Virginia, particularly in the counties, are as a whole poorly paid, that the compensation policy of the State affects more or less directly the supply and the quality of the personnel, and that the supply of well trained teachers will in the future depend more and more upon a fair policy of compensation. Should the State provide for a substantial raising of salary levels for public school teachers? The answer to this question is not simple.

Our opinion may be expressed as follows: Increments in teachers' salaries scientifically administered are bound to have a salutary effect upon the whole teaching personnel. Such increments are necessary to protect Virginia, else the best of the potential supply will gradually slip away to other States more provident in this respect. Experience in this country dictates that a margin for teachers above bare living costs induces teachers to secure further training between terms of service. The result is improved teaching. A reduction of turn-over and a corresponding increase in tenure, essential to a stability in the teaching situation, will tend to follow improved salary conditions. Finally, and perhaps most important, evidence that teaching offers reasonable financial reward, tends to attract into pre-service training for the work an increasingly better endowed quality of personnel.

Conclusions

(1) The local governmental units in Virginia spend \$14,167,000.00 a year on elementary and high schools. The State contributes \$5,531,000.00 to them and gives \$164,000.00 to the support of the State Board (which pays the local division superintendents about \$101,000.00). The State also spends \$1,550,000.00 on ten higher educational institutions.

(2) About forty-one per cent of governmental cost payments in Virginia in 1926 were for schools and sixteen per cent for roads; in 1913 these percentages were fifty-one and six.

(3) The State now pays twenty-three per cent of the cost of maintaining elementary and secondary schools, whereas in 1910 it paid approximately thirty-five per cent. These contributions include direct payments to schools as well as State aid proper.

(4) On the basis of the 1913 dollar values the State's appropriation for the elementary and secondary school system went down from about \$3,298,000.00 in 1913 to \$1,862,000.00 in 1920 and has since risen to the present figure of \$5,791,000.

(5) There is great need for serious attention to the handling of the fiscal affairs and accounts in the local school systems. The debt problem in many cases is acute. Interest on local debt involves an average annual cost of \$1.70 per pupil, a figure of particular significance in view of the very low total costs per pupil, as shown under (7).

(6) The basis of distribution of State support to local school systems is wrong. It not only fails of the real purpose of State support, but also perpetuates an undesirable situation.

(7) The average per pupil expenditures are very low. In many sections they are much too low. They vary from \$11.56 to \$75.89 in the counties and from \$33.28 to \$95.00 in the cities. Teachers' salaries, as might be expected, reflect these conditions. (A full discussion of teachers' salaries is to be found in Appendix II.)

(8) As to the effectiveness of educational expenditures at present, it must be admitted that the elementary and secondary school systems get as much value per dollar as they are entitled to. There is little "room" for waste except as all effort below a certain standard involves a large element of waste from the point of view of what the children of Virginia might be getting in these years, but are not getting.

(9) As to the effectiveness of the expenditures for higher institutions the same observation applies in a measure, but there the opportunities for economy through wiser policy and better organization have not been exhausted.

(10) All through the study, the lack of clear records of significant financial and statistical facts has been brought out. Virginia has never had a balance sheet. The records of the county treasurers, division superintendents, State Board of Education, State Auditor, and State Treasurer, as to expenditures, receipts and balances, differ to such an extent, because of the different accounting treatments, that the determination of the facts involves great labor and discrimination and still leaves totals in a condition of little better than good estimates.

Recommendations

Accepting the conclusion, arrived at in the other sections of this general report, that Virginia needs to devote more money to its educational system, the following recommendations as to what the State government should do are offered:

I. That the State do everything possible to induce and aid the counties and cities to bring their assessed valuations up to fair values in order that full local ability to meet school costs may be known and utilized. (See Chapter LIII.)

II. That the State of its own initiative and through some special temporary agency inquire into the financial condition of each county and city school system and as the result of such inquiry develop (1) suggestions to each unit for meeting its present financial problems, (2) a plan for dealing with the local debt situation

in general; (3) a uniform system of records and accounts for the recording of local financial transactions, the portrayal of current financial condition, and the reporting of financial operations. (See Chapter LIV.) Also, that a financial adviser be provided for in the staff of the State Board of Education to give continuous counsel to local educational authorities in these matters.

III. That the State government progressively increase its support of the school system both absolutely and in relation to the local support given. (See Chapter LV.)

IV. That the apportioning of all State support be done according to the principles outlined in this report (see Chapter LVI) and that immediate steps be taken, first, to remove the present obstacles to such an efficacious and logical distribution of State moneys, and, second, to provide for the actual development of a new and improved plan of distribution.

V. That the contemplated increases in State appropriations be planned now (subject to annual revision) for a period ahead of some five or ten years. (This and the recommendations next following are discussed in Chapter LVIII.)

VI. That this expenditure plan be laid out on the principle that the additional moneys as allowed be devoted to the strengthening of those elements in the educational organization that will have the most far reaching beneficial effect on the *whole* school system (in proportion to their cost)—these elements to be taken up for development in the order of their influence on the efficiency of the whole system.

VII. That the actual giving of the additional support proposed in the plan be contingent upon an affirmative showing of increased effectiveness resulting from previously allowed increases.

VIII. That immediate provision be made for adequate records as to classified expenditures, attendance, unit costs, and other significant statistics and indices of progress and economy, all in order that the State may have a basis for measuring the progress made. It is unquestionable that the educational authorities should in any case be provided with these aids.

IX. That early, if not in fact first, in the list of services to be provided for under this program, the State place the headquarters staff of its State Board of Education. That this staff be reorganized and strengthened, first, as a research and service agency rather than an agency for centralized control of local schools, and, second, as an agency for the integrated administration of institutions for the professional preparation of teachers as well as other State institutions of higher education.

X. That, next, provision be made for the putting into effect the improved plan for the distribution of State support for local units as recommended under IV, together with a reasonable increase, as shown to be necessary, in the amount of money to be so distributed.

XI. That the teachers colleges be placed next in order for adequate support, with the understanding that before this element is approached (1) these institutions be integrated to avoid duplication of effort, (2) that evidence be made available to show that increased money will go to provide a more effective training of not more teachers than can be normally placed in service, and (3) that some portion of the increases be used as maintenance scholarships for students.

XII. That larger appropriations be made for the institutions of higher education (not including the teachers colleges here) only when their work has been given greater unity and lesser duplication as part of the general task of what may be termed the "State university system." That such increased appropriations be especially applied to insure present appropriations against an ineffectiveness in the purchase of instructional service and equipment, and to insure against plant deterioration and unsatisfactory living conditions for students.

DIVISION X

**Special Topics and Supplementary
Educational Agencies**

CHAPTER LXIII

WHAT THE PEOPLE OF VIRGINIA DESIRE AND EXPECT FROM THE SCHOOLS AND HIGHER INSTITUTIONS

The attitude of the public towards its schools should be given careful consideration by those who assume the responsibility of making proposals for changes in the program of public education. Public approval and support are necessary to put into effect the recommendations of a survey staff charged with the duty of ascertaining how the public schools and higher institutions could serve the people better. With the belief that the schools of Virginia could render more effective educational service if it were known what the people desire and expect from them, the director of the Virginia educational survey requested the writer to make an investigation to gauge public opinion in Virginia with reference to its public schools.

The method employed in the endeavor to secure a trustworthy cross section of public opinion in Virginia toward public education was an investigation of public attitude based upon the returns of a questionnaire devised by the writer and the director of the survey. This questionnaire consisted of nine questions with the request for frank and specific statements by those who were asked to fill it out. The questionnaire employed is reproduced below.

Interest of the People in the Schools

The questionnaire was sent to representative citizens of Virginia. Two lists of names were secured, a "selected" and a "random" list. The "selected" list contained three hundred and eighty three names of Virginians listed in the 1926 edition of "Who's Who in America;" the "random" list, made up by selecting every fifteenth name from a list of ten thousand Virginians of every trade and calling used as the mailing list of the University of Virginia News Letter, contained six hundred and forty-seven names. In all, ten hundred and thirty questionnaires were sent to Virginians as follows:

(a) From the "selected" list	362	21	383
(b) From the "random" list.....	613	34	647
	<hr/>	<hr/>	<hr/>
	975	55	1,030

The "random" list was secured to provide a check against the selected character of the "Who's Who" list.

The questionnaires were sent out on October 5. On November 4, when the tabulations had to be completed in order to incorporate the findings of this study in the general report of the survey, one hundred and twenty-six replies to the questionnaire had been received. After the completion of this tabulation, twenty replies to the questionnaires have been returned. Many additional replies to the questionnaire will doubtless be received. The one hundred and twenty six replies to the questionnaire on which this report is based are distributed as follows:

LIST	Questionnaires		Per Cent Returned
	Sent	Returned	
"Selected"	383	78	20.1
"Random"	647	48	7.3
	<hr/>	<hr/>	<hr/>
	1,030	126	12.1

The returns from the "selected" list of twenty per cent are very satisfactory when compared with the returns from somewhat similar studies made in Oregon and California. The returns from the Oregon study were 3.8 per

cent of the 8,000 questionnaires sent out; the returns from the California study, 31 per cent of the 703 questionnaires mailed.

The return from the "random" list of 7.3 per cent compares very favorably with the 8 per cent return from a somewhat similar list of the California study and is much higher than that received to the somewhat similar questionnaire sent out in Oregon.

The one hundred and twenty-six replies were from persons scattered throughout the State and represented in all twenty-five occupations. These occupations in the tables that follow are grouped according to the classification of occupations in the Federal census. It is believed that the returns from this questionnaire are fairly representative. It is also believed that the reliability of the samplings from the citizens is very satisfactory.

The occupations of those filling out the questionnaire are given in the accompanying table. It is rather interesting to note that 57 per cent of those answering the questionnaire from the professional group are engaged in some form of teaching service. Thirty-six and seven-tenths per cent of all the replies come from those engaged in teaching. It would appear that those engaged in educational work in the State were more interested in the questionnaire than those from any other occupational group.

OCCUPATIONS	No. Answering Questionnaire
I. Professional Service.	
(a) Teaching	45
(b) Ministry	10
(c) Medical	6
(d) Legal	8
(e) Engineering	3
(f) Nursing	1
(g) Writing	6
	79
II. Manufacture	8
III. Trade	23
IV. Agriculture	13
V. Personal Service	3
	47
	126

The forty-five teachers who filled out the questionnaire are engaged in many types of educational service in the State. Twenty-six of them are school teachers; six, school principals; three, school superintendents; six, college presidents; two, college deans; and two, college professors, representing both public and private schools.

The Character of Elementary Education

Question I deals with elementary education and seeks to determine the role of the elementary school. The accompanying table summarizes the replies with reference to the kind of training the elementary schools should give boys and girls.

Training for:	Frequency
1. Command of fundamental processes, with emphasis on the three R's	101
2. Social—civic—moral responsibility	62
3. Health efficiency	28
4. Practical efficiency	15
5. Recreational and aesthetic participation	12
6. High school work	9
7. Recognition of individual differences	3
8. Worthy use of leisure time	2
9. Domestic responsibility	1

The obligation of the elementary school to provide training in the fundamental processes, social, civic and moral responsibility and for the health is emphasized by the majority of those who filled out the questionnaire. The other functions of the elementary school listed in the above table are emphasized principally by teachers and physicians.

The aims and functions of the elementary school set forth in the above table compare very favorably with statements in educational literature dealing with this subject. It is evident that those who filled out the questionnaire have a very accurate conception concerning elementary education.

Benefits that Pupils Should Receive from Elementary Education

Question I (a) : What benefits should pupils derive from an *eight year* course in our elementary schools? was asked in order to secure an expression of opinion concerning the desirability of adding an additional school year to the present *seven-year* elementary school system in Virginia. Evidently this question was not clear as only two persons, both high school principals, gave an opinion on this subject. The replies to this question as tabulated in the following table are very illuminating. The benefits of the elementary school, as listed in this table, are in close harmony with the "seven objectives" of education, as stated by the National Education Association committee on the reorganization of secondary education:

OCCUPATIONS

	I. PROFESSIONAL SERVICE							II. Manufacturing	III. Trade	IV. Agriculture	V. Personal Service	Total Answers	
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing						
What benefits should pupils derive from an eight-year course in our elementary schools?													
A. Knowledge and ambition to secure high school education.....	22	1				1	2	2	4	1			33
B. Command of fundamental processes.....	16			1			1		3				21
C. Civic efficiency.....	22	3	2	1	1		1	1	7				38
D. Ethical and moral efficiency.....	7	3	1	1			1		3	1	2		19
E. Practical efficiency.....	2	2	1	1			1		2	1			10
F. Physical efficiency.....	4			1			1	1		1			8
G. Avocational efficiency.....	4		1	1				1	6		2		15

The first four benefits listed in the above table were stressed by most of those who answered this question. The other values were stressed primarily by teachers and tradesmen.

The Merits and Defects of Elementary School Work

Question I (b): What do you think are the chief merits and defects of our elementary school work? was the third question asked concerning the elementary school. The accompanying table gives a summary of the answers to this question. It is of interest to note that there are more statements concerning the weaknesses of the elementary school than there are concerning the merits of this school. The replies to this question have been tabulated in detail so as to indicate precisely from what source this information is obtained. The commendations concerning the work of the elementary school come principally from teachers, ministers, authors and those who are engaged in manufacturing and trade pursuits. The criticisms concerning the work of the elementary school are not confined to any one class. Most of those who answered this question take occasion to criticise the offering of the elementary school. These critical statements are rather fundamental in nature and, if true, should receive careful consideration from those in charge of our public schools.

OCCUPATIONS

What do you think are the chief merits and defects of our elementary school work?

ANSWERS

	I. PROFESSIONAL SERVICE							II. Manufacturing	III. Trade	IV. Agriculture	V. Personal Service	Total Answers	
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing						
MERITS:													
1. Democratizing society.....	13	3	2	.....	.....	.....	1	1	.....	.....	.....	.....	20
2. Well developed course of study and good textbooks.....	8	1	.....	2	.....	.....	1	2	4	.....	.....	.....	18
3. Economically administered.....	6	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	8
4. Professionally trained teachers.....	5	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	8
5. Reasonably efficient school buildings, equipment sanitation.....	3	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	6
6. Co-operating parents.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
DEFECTS:													
1. Poor instruction.....	39	2	3	5	1	1	4	1	11	1	2	70	
2. Too many subjects taught.....	8	1	.....	1	.....	.....	2	.....	6	1	.....	19	
3. Lack of recognition of individual differences.....	9	.....	1	1	1	.....	3	1	2	.....	.....	18	
4. Overcrowded classes.....	7	.....	1	1	.....	1	2	2	1	.....	.....	15	
5. Improper physical equipment of buildings.....	4	.....	.....	1	.....	.....	1	.....	.....	.....	.....	6	
6. School term too short—school day too long.....	4	.....	1	1	.....	.....	.....	.....	.....	.....	.....	6	
7. Inefficient school superintendents and principals.....	5	.....	1	1	.....	.....	.....	.....	2	.....	.....	9	
8. Failure to provide for thrift training.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	3	
9. Lack of equal educational opportunities.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	
10. Lack of standardization.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	

The Curriculum of the Elementary School

The following table gives the information received from Question III, (a): What subjects do you think should be given chief place in the elementary schools? There is nothing surprising about the returns of this question. They indicate that those answering have a definite idea concerning the subjects that should be taught in the elementary school. The "Three R's" stand at the head of the list:

OCCUPATIONS

The Role of the High School

The returns on Question II: What kind of training do you think the high school should give boys and girls? is very significant because of the specific statements that are made. It seems to be clear that there is a very general agreement as to the type of training that the high school should furnish. It is evident that the majority of those answering this question feel that the high school should not only offer college preparatory work, but should also provide vocational training. The following table summarizes the answers to this question according to occupational groups:

OCCUPATIONS

What kind of training do you think the high school should give boys and girls?	I. PROFESSIONAL SERVICE							II. Manufacturing		III. Trade		IV. Agriculture		V. Personal Service		Total Answers
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing									
A. Vocational training.....	36	4	6	5	1	2	3	3	10	2	1	73				
B. College preparation.....	32	2	6	3	1	....	1	3	6	3	1	58				
C. Social-civic responsibility.....	16	1	....	1	....	1	3	8	4	....	....	34				
D. Physical efficiency.....	8	....	2	....	....	....	....	3	....	....	....	13				
E. Intellectual efficiency.....	3	2	....	2	....	....	....	2	....	....	....	9				
F. Thorough training in few rather than many subjects.....	5	....	....	....	1	....	....	1	....	....	....	7				
G. Training in English, Latin, mathematics, science..	19	2	....	....	....	1	3	13	....	....	....	38				
H. Ethical training.....	4	....	1	....	....	1	....	....	....	....	....	1	7			

It is evident that those who answered this question have a good idea of the aims and functions of secondary education. It is of interest to note that thirty-eight persons feel that the high school should give boys and girls effective training in English, Latin, Mathematics, and Science. Thirteen of these persons are tradesmen, as is indicated in the table. Apparently, not many feel that the high school should offer effective training in physical education. Five college men are of the opinion that the high school should offer thorough training in few rather than many subjects.

Benefits to Pupils of High School Instruction

Question II (a): What benefits should pupils derive from a high school course? brought forth some very definite statements, and from members of all the occupational groups. The following table summarizes the returns on this question:

OCCUPATIONS

ANSWERS	I. PROFESSIONAL SERVICE							II. Manufacturing	III. Trade	IV. Agriculture	V. Personal Service	Total Answers	
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing						
What benefits should pupils derive from a high school course?													
A. Ability to pursue college work.....	23	1	1	1	1	1	.....	.....	2	.....	.....	30	
B. General or liberal training.....	19	4	4	5	.....	.....	3	4	5	2	1	47	
C. Occupational training, essential to choose a vocation.....	23	5	1	2	.....	.....	2	3	4	1	.....	41	
D. Etnical character.....	5	1	1	1	.....	.....	.....	1	3	1	1	14	
E. Civic responsibility.....	5	2	1	2	.....	.....	.....	2	5	.....	1	18	
F. Avocational efficiency.....	9	1	.....	.....	.....	.....	.....	.....	2	.....	2	14	
G. Intellectual power.....	3	.....	.....	.....	.....	1	.....	1	1	.....	6		
H. Physical efficiency.....	3	.....	1	.....	.....	.....	1	.....	.....	.....	5		

Many persons answering this question gave such general statements that it was impossible to classify all of them. Such statements as the following were not infrequent: "Working knowledge of few subjects;" "awakening of definite life ambitions;" "thirst for learning;" and "gratitude to society and our State for training received."

Merits and Defects of High School Work

Outside of those engaged in teaching very few of the persons answering Question II (b): What are the chief merits and defects of our high school work? have a good word to say for the high school. They are not slow, however, to point out the defects in our high school work. Each trade and profession represented in the replies has definite criticisms to offer concerning the work of the high school. These criticisms are of too serious a nature not to receive careful consideration by those who are responsible for this type of work. The severest criticisms come from the professional groups as indicated in Table VIII. No one reading the answers to this question can doubt the seriousness or honesty of those who have taken the time and trouble to answer it. There seems to be definite dissatisfaction with the work of the high school. Many feel that high schools in Virginia have developed too rapidly and that the remedy for the present situation is to be found in the consolidation of small high schools into larger ones.

OCCUPATIONS

What are the chief merits and defects of our high school work?

ANSWERS

	I. PROFESSIONAL SERVICE							II. Manufacturing			III. Trade			IV. Agriculture			V. Personal Service		Total Answers
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing												
MERITS:																			
1. Democratizing society.....	9	1	1	.....	.....	.....	.....	1	4	.....	.....	.....	.....	.....	.....	.....	.....	16
2. Training for citizenship.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
3. Major emphasis on citizenship rather than training for college.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
4. Fairly efficient teachers.....	5	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
5. Attracting and holding more pupils for high school work.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	4
6. Cooperation between school and society.....	2	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	4
7. Training for vocational work.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2
8. Good school buildings and equipment.....	1	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	3
9. Training in social-civic responsibility.....	2	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
10. Enriched course of study.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
DEFECTS:																			
1. Poor instruction.....	20	3	2	2	1	2	4	2	12	2	.....	.....	.....	.....	.....	.....	.....	50
2. Lack of directed study and vocational guidance.....	18	2	4	1	.....	1	1	2	5	1	1	1	1	1	1	1	1	36
3. Poorly trained teachers.....	11	1	.....	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	15
4. Overcrowded conditions.....	18	1	.....	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	22
5. Inadequate ethical training.....	1	3	3	1	.....	.....	.....	.....	2	1	1	1	1	1	1	1	1	12
6. Lack of emphasis on formal grammar and mathematics.....	3	.....	.....	1	.....	1	1	2	1	.....	1	.....	1	1	1	1	1	10
7. Too much attention to college preparation.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	1	1	1	1	4
8. Too much political pressure on school boards on selection and placement of teachers.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
9. Lack of adequate provision for physical training.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	1	1	1	1	2
10. Lack of standards for measuring results of teaching.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
11. Too much attention given to extra-curricular activities.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	1	1	1	1	1	3

The High School Curriculum

Information was sought to ascertain the opinion of the people concerning what subjects should be given chief place in the high school curriculum. The answers to this question are listed in the accompanying Table. There is nothing unusual about this table. It indicates that people who filled out this question have a very definite idea of subjects that should go into the high school curriculum.

OCCUPATIONS

What subjects do you think should be given in the high schools?

ANSWERS

	I. PROFESSIONAL SERVICE								IV. Agriculture	Total Answers	
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing	II. Manufacturing	III. Trade		
1. English and composition.....	45	2	1	4	1	1	3	3	9	2	71
2. Mathematics.....	31	2	2	3	1	1	3	3	9	2	57
3. History and social science.....	30	2	2	2	1	....	3	4	9	1	54
4. Science (chemistry, physics, biology).....	26	3	....	3	1	1	1	2	7	1	45
5. Latin.....	14	....	2	3	1	1	1	1	5	1	29
6. Domestic science.....	11	1	....	1	....	....	1	....	2	1	17
7. Agriculture.....	8	1	....	1	....	....	1	....	2	1	14
8. Modern language.....	11	....	....	1	....	1	1	1	1	1	17
9. Manual training (and other industrial courses).....	6	....	1	....	....	....	....	1	....	....	8
10. Ethics.....	2	1	....	....	....	....	....	....	....	....	3
11. Music and art.....	4	1	....	....	....	....	....	....	....	....	5
12. Parliamentary law, business methods.....	1	....	....	1	....	....	....	....	1	....	3
13. Hygiene and health.....	4	....	....	....	....	....	....	....	....	....	4
14. Commercial work.....	3	....	....	....	....	....	....	....	1	....	4
15. Psychology.....	....	....	....	....	....	....	....	....	1	....	1
16. Natural science.....	1	....	....	....	....	....	....	....	....	....	1
17. Surveying.....	....	....	1	....	....	....	....	....	....	....	1
18. Bible.....	....	....	....	1	....	....	....	....	....	....	1

Should the High School Be a Free Institution?

Question IV: Do you believe that tuition in the high school should be entirely free? brought forth some interesting answers. The accompanying table summarizes these replies.

OCCUPATIONS

Do you believe that tuition in high schools should be entirely free? Why?

ANSWERS

	I. PROFESSIONAL SERVICE								V. Personal Service	Total Answers	
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing	II. Manufacturing	III. Trade		
I. Those answering..... Yes	32	5	2	3	1	1	3	4	14	5	77
II. Those answering..... No	13	....	3	2	....	....	2	1	3	2	20

Reasons given in order of frequency from those who believe that the high school should be a free public institution are as follows:

Many high school pupils are unable to pay tuition; the equalization of educational opportunity demands that tuition be free in the high school; to induce children to take high school education; taxes collected from all, so all should have high school education; for same reason that elementary school is free; because the farmers are paying enough taxes to have it; it is a common benefit; it is a matter of self preservation and democracy; a good citizen is an asset; Virginia badly needs more democracy; can't call them free schools when tuition is charged; the State owes an education to its youth.

The reasons given by those who believe that the high school should not be a free institution are:

That which costs nothing is rarely appreciated; to relieve the taxpayer; pupils should not want to be a further burden to taxpayers; it is a form of socialism.

It is evident that the majority of those answering this question are opposed to the charging of tuition in public high schools.

The Role of the Higher Institutions

The answers to Question V: What kind of training in general do you think the higher institutions in Virginia should give? were given by fifty per cent of those who filled out the questionnaire. A great many persons did not attempt to answer this question and most of these stated that they were not qualified to discuss the work of the higher institutions. None of the six authors represented in this study expressed themselves definitely on this topic. The sixty-three persons who replied to this question concerning the work of the higher institutions represent most of the occupational groups and have definite ideas concerning the program of these institutions. The accompanying table summarizes the answers to this question.

CHARACTER OF TRAINING VIRGINIA HIGHER INSTITUTIONS SHOULD PROVIDE

What kind of training in general do you think the higher institutions in Virginia should give?	I. PROFESSIONAL SERVICE						OCCUPATIONS			Total Answers
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	II. Manufacturing	III. Trade	IV. Agriculture	
1. General culture—liberal education leading to cultural B.A. or B.S. degree.....	32	4	4	4	1	1	3	4	5	58
2. Professional and technical education.....	24	5	.....	3	2	1	3	6	2	46
3. Vocational training.....	5	1	.....	1	.....	.....	1	2	1	11

It is evident, from this table, that those answering this question feel that the higher institutions should provide three types of training: Liberal culture, professional and technical education, and vocational training. Fifty-eight of the sixty-three persons stress the value of liberal culture, forty-six believe that the higher institutions should provide professional and technical education, while only eleven are of the opinion that it is the function of higher institutions to offer vocational training.

Many persons feel that the higher institutions should give what Virginia young men and young women need to prepare themselves for successful careers in life so that they may lead lives of usefulness, be good and produc-

tive citizens, think for themselves, and use their leisure time for further education and culture.

Some interesting statements not connected with the question were given by several. For the most part, these statements have reference to the duplication of the work found in the higher institutions in Virginia.

Value of College Education

Question V (a): What benefits should our students derive from a course in a higher institution, was answered by forty-five persons. All the occupational groups are represented in these replies which are tabulated in the following table. There is nothing unusual about the answers to this question. The opinions expressed represent the usual values claimed for college education.

VALUE OF COLLEGE EDUCATIONS

ANSWERS	I. PROFESSIONAL SERVICE							OCCUPATIONS				Total Answers
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing	II. Manufacturing	III. Trade	IV. Agriculture	V. Personal Service	
1. Specialization in one field of work.....	27	1	1	2	.....	.....	3	2	8	1	.....	45
2. Social-civic responsibility.....	13	3	1	1	.....	.....	.....	1	4	1	1	25
3. Cultural background.....	11	.....	1	2	.....	.....	2	1	4	.....	1	22
4. Liberal knowledge.....	6	.....	.....	.....	3	.....	2	.....	1	.....	.....	12
5. Intellectual efficiency.....	10	1	1	.....	.....	.....	.....	1	1	4	.....	18
6. Ethical character.....	5	1	.....	.....	.....	.....	.....	1	1	4	.....	12
7. Leadership in society and government.....	9	1	.....	1	.....	1	2	2	4	.....	.....	20
8. Knowledge of several specific fields.....	3	.....	.....	.....	.....	.....	2	.....	1	.....	.....	6
9. Religious culture.....	4	.....	1	.....	.....	.....	.....	.....	2	.....	.....	7
10. Avocational ability.....	3	.....	.....	.....	.....	.....	.....	2	1	.....	.....	6
11. Ability to undertake educational research.....	2	.....	2	.....	.....	.....	1	1	.....	.....	.....	6
12. Physical efficiency.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2

The chief values that a student should derive from a course in a higher institution as stated by those who felt that they were competent to express themselves on this topic are well summarized in the following quotation from an English professor:

"From our colleges, the ability to think clearly and sanely, and to live rightly; from our graduate departments, special knowledge of a given subject and some ability to do research in it; from our technical schools, proper preparation for entering the business or profession in question."

The Character of the Special Training that the Higher Institutions Should Provide

Question VI: What kind of special training should the State institutions of higher learning give? was answered by thirty-eight persons. Those who failed to venture an opinion on the kind of special training that the institutions of higher learning should give stated very frankly that they were not quali-

fied to discuss this topic. Eighteen said that this matter should be decided by the educational leaders since it was a technical question. Ten persons contented themselves with the general statement that the higher institutions should offer all types of special training. It is interesting to note that none of the three engineers, only one of the six authors, and one of the thirteen farmers answered this question. Ten persons ventured the opinion that there is too much duplication in special training in the higher institutions in Virginia. Several persons failed to discriminate between this question and question five, and eight persons, three of whom are in the teaching profession, named academic training as a type of special work.

OCCUPATIONS

ANSWERS	I. PROFESSIONAL SERVICE						II. Manufacturing	III. Trade	IV. Agriculture	Total Answers
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Nursing	f. Writing				
I. Professional training (general).....	15	1	3	4	.....	.....	1	5	.....	29
a. Engineering.....	8	1	2	.....	.....	.....	2	4	.....	17
b. Law.....	8	2	1	1	.....	.....	1	4	.....	17
c. Medicine.....	8	2	1	.....	.....	.....	2	2	.....	15
d. Education.....	7	1	1	1	1	.....	1	1	.....	13
II. Agricultural training.....	4	2	1	.....	1	.....	1	4	.....	13
III. Trade and vocational training.....	14	2	1	1	.....	1	3	5	1	28
IV. Business and commercial training ..	3	2	1	1	.....	.....	3	1	.....	11
V. Academic training.....	3	.....	.....	1	.....	.....	2	2	.....	8

The replies of the twenty persons engaged in the teaching profession are rather interesting. Only three of them would have the higher institutions offer business and commercial training. Four of them believe that these institutions should provide training in agriculture and only seven specified training in the field of professional education.

Running through many of the replies there is a rather definite feeling that no student should be retained in any institution of higher learning who is not applying himself or herself to the various duties prescribed by the higher institutions. These persons feel that "the toleration of idleness and laxity of conduct is the outstanding evil of college life." The answers to this question indicate that those who were willing to express an opinion have a good idea of the kind of special training the higher institutions should give. The writer, however, feels that the majority of those who considered in a serious manner the questionnaire felt that the matter of special training in the higher institutions in Virginia should be determined by the educational forces of the State.

Coeducation in the Higher Institutions

Question VII: Do you think that the higher institutions in Virginia should be open to men and women on the same terms? brought forth some interesting replies. Eighty-two men and nine women expressed themselves with more or less feeling on this subject. The nine women answering this question, five of whom are teachers, three writers and one nurse, all believe, with the exception of one teacher, that the State institutions should be open to men and women on exactly the same terms.

There seems to be no concensus of opinion from the eighty-two men who answered this question. Fifty-two of them believe, with more or less mental reservation, that the higher institutions should be open to men and women

on the same terms. Twenty-five are definitely opposed to coeducation in our State institutions. Five gave qualified opinions.

A typical "yes" answer is: "Women are citizens of the Commonwealth and are entitled to an education as well as men." There is a good deal of uncertainty in the minds of those who favor co-education as to the practical method of providing for the women educational opportunities comparable to those now provided for the men. Some feel that it might be desirable to establish separate institutions for women; others are of the opinion that coeducation would work in all of the Virginia institutions except the Virginia Military Institute and the four State Teachers Colleges; still others feel that coeducation in our State institutions should be limited to graduate and professional work. There seems to be such a variety of opinion on this topic that the writer feels that no definite conclusions can be drawn from the replies to this question.

OPINIONS CONCERNING COEDUCATION IN THE HIGHER INSTITUTIONS

Do you think all of the State higher institutions should be open to men and women on the same terms?

ANSWERS

	I. PROFESSIONAL SERVICE						OCCUPATIONS				Total Answers
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Nursing	f. Writing	II. Manufacturing	III. Trade	IV. Agriculture	V. Personal Service	
1. Men (yes and probably yes).	24 11	4 1	2 3	2 3	... .	3	4	28 7	4	1	52 25
2. Women (yes)	4 1	... .	... .	... .	1	3	... .	... .	... .	... .	8 1
3. Men (qualified)	1	1	1	1	... .	... .	1	... .	... .	... .	5

General Opinions Concerning the Schools and Higher Institutions

Questions VIII and IX are general in character and were asked in order to secure the attitude of the public concerning the schools and higher institutions and to ascertain, if possible, if the people are satisfied with these institutions.

A great many people, representing most of the occupational groups, state that they do not believe that the people of Virginia know what they want from the schools and higher institutions. They feel that it is the business of these institutions to provide the type of training that the people of Virginia need. The answers to Question VIII: What do you think the people of Virginia desire and expect from the schools and higher institutions of learning? are summarized in the accompanying table.

The following answer from a college president seems to summarize in an excellent manner the answers of those who expressed an opinion on this topic:

"That they shall keep close to the people of Virginia; meet the needs that are peculiar to the State of Virginia; preserve the best of Virginia traditions and culture; develop Virginia resources, both human and material; build up the elementary and secondary school system by providing well trained teachers and supervisors; prepare Virginia boys and girls for success in life; operate at as low a cost as is consistent with efficiency; avoid all waste as far as practicable, and duplication among themselves as far as it may be proved to be wasteful and undesirable; and work in harmony and cordial cooperation with one another; under the dictates of a State educational consciousness rather than of an institutional consciousness, so that all may be parts of a unified system in fact as well as in theory."

**WHAT THE PEOPLE DESIRE AND EXPECT OF THE SCHOOLS
AND HIGHER INSTITUTIONS OF VIRGINIA**

	I. PROFESSIONAL SERVICE							OCCUPATIONS			Total Answer	
	a. Teaching	b. Ministry	c. Medical	d. Legal	e. Engineering	f. Nursing	g. Writing	II. Manufacturing	III. Transportation	IV. Trade	V. Agriculture	VI. Personal Service
That the schools be practical, efficient, and thorough.....	22	2	3	2	.....	2	4	4	.....	6	3	48
2. That they meet the needs of the students and society.....	5	2	3	1	.....	1	.....	.....	4	.....	16	.....
3. That they do not destroy the religious and moral ideals of students.....	6	3	3	.....	.....	.....	.....	.....	4	.....	16	.....
4. That the people do not know what kind of training the schools should give.....	9	1	1	3	.....	.....	.....	1	.....	3	1	19
5. That the schools be as efficient as possible for the money expended.....	5	.....	1	.....	1	.....	1	2	.....	3	.....	14
6. That the schools provide real training for citizenship.....	4	1	1	.....	.....	.....	.....	2	.....	6	1	15
7. That school administrators and teachers be efficient, patient, and reasonable.....	4	.....	.....	1	.....	2	.....	.....	1	.....	8	.....
8. That the schools offer training for vocational work as well as professional service.....	3	.....	.....	.....	.....	1	1	.....	1	1	.....	7
9. That there be better school buildings and equipment.....	2	.....	.....	1	.....	.....	.....	.....	.....	1	.....	4
10. That the schools be more democratic.....	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	4
11. That the schools teach the necessity for the preservation and development of Virginia resources.....	4	.....	.....	.....	.....	.....	2	.....	1	.....	.....	7
12. That the colleges should lead the people, not be led by them.....	1	.....	1	2	.....	.....	.....	.....	.....	.....	1	4
13. That there be conscientious endeavor in the lower schools.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2

The final question is concerned with reference to the general attitude of the public regarding the program of the schools and higher institutions. This question: Do you think our people are generally satisfied with our schools and higher institutions? brought forth a variety of answers. One hundred and five persons expressed themselves on this subject. Forty answer "yes" and sixty-five answer "no." Of the forty answering "yes," thirty are teachers, two authors, three ministers, three tradesmen, one merchant and one day laborer. Of the sixty-five answering "no," twenty-three were teachers, twenty-two tradesmen, five doctors, four lawyers, four farmers, two merchants, one engineer, one author and one nurse.

It is practically impossible to summarize the statements made by those who essayed to answer this question. Some feel that all except the most intelligent are satisfied, some think that the people are too well satisfied with the schools for the welfare of the State, and still others are of the opinion that public education is costing entirely too much. Nineteen state that there are too many "frills" connected with the schools; fifteen are of the opinion that the spiritual and moral aspects of education are being neglected in our schools, particularly in our higher institutions; thirteen believe that the main trouble

with our schools is poor instruction and six are of the opinion that the high schools and colleges cater too much to mass education.

Summary

1. The number of persons who took the time to express opinion concerning the work of the schools and higher institutions constitute a very representative group of Virginia citizens. Sixteen per cent of the women and twelve per cent of the men to whom the questionnaire was sent replied. The explanation of the large number of persons engaged in the teaching profession who answered the questionnaire is doubtless explained by their interest in and knowledge of school affairs.

2. The replies indicate that the people have a rather definite idea of the aims and functions of our public institutions. Persons from all occupational groups stress the value of the main "cardinal principles of education." That so few mention *worthy home membership* and *worthy use of leisure time* as objectives is doubtless explained by the fact that the public has not as yet recognized these as definite school objectives. It is interesting to note in this connection that many persons other than teachers and ministers stress in rather forceful manner the social-civic-moral objective and favor definite social and moral training in both the high school and the college. A characteristic statement concerning the importance of this objective comes from a distinguished layman who feels that our school system of education has failed to produce law abiding citizens, who recognize the value of courtesy in human behavior and appreciate the worth of human life.

3. An important implication from the replies to the questionnaire comes in answer to the charge often made that such a questionnaire is valueless because the people do not know what they want and are not capable of judging on so technical a matter as the work of the schools. This claim is largely refuted by those who took time and trouble to answer the questions. Their answers on the various questions correspond almost exactly, in order of the emphasis placed on the different objectives, offerings, etc., with both the opinion of teachers themselves and with educational experts in the field of public education. Indeed, it seems probable that general public attitudes toward and demand for education have been the bases from which educators of today have built an educational theory and practice.

4. The criticisms expressed concerning the work of the schools, do not mean that those who voiced them are hostile to our public educational institutions. It is evident from a careful study of these criticisms that those who expressed them are so interested in the schools and have so much faith in them that they have ventured their opinions even at the risk of being charged with ignorance and hostility. It is significant, however, that they have placed their finger on many educational sores that have long perplexed and worried the educational leaders of this State.

CHAPTER LXIV

THE CONDITIONS AND ADEQUACY OF PUBLIC SCHOOL BUILDINGS IN VIRGINIA

A questionnaire which was mailed to the division superintendents of schools in each county and city of the State on October 19th called for the following information:

Buildings:

1. Number.
2. Name.

Rooms for elementary classes (grades 1-7):

3. Number of standard classrooms.
4. Number of pupils enrolled in standard classrooms.
5. Number of non-standard classrooms.
6. Number of pupils enrolled in non-standard classrooms.
7. Total enrollment in grades 1-7.

Rooms for high school classes:

Number of classrooms.

8. Standard.
9. Non-standard.

Number of science laboratories.

10. Standard.
11. Non-standard.

Number of home economics laboratories.

12. Standard.
13. Non-standard.

Number of shops.

14. Standard.
15. Non-standard.
16. Number of high school teachers.
17. Total enrollment in high schools.
18. Approximate cost and date new buildings since 1920.
19. Number of standard classrooms and laboratories in buildings since 1920.
20. Classrooms discarded since 1920.

For the purpose of securing uniformity in the classification of classrooms as standard and non-standard, the following standards were used:

Standard rooms:

First. Rooms provided for a minimum 12' ceiling height. (To be estimated in case of doubt.)

Second. Classrooms providing for a minimum of 20 per cent floor space in glass area to the left or to the left and rear of the pupils. (To be estimated in case of doubt.)

Third. Classrooms providing for a minimum system of ventilation, including window deflectors, vent ducts running from floor line or ceiling of wardrobe through roof.

Fourth. Classrooms heated with a minimum of either an approved make of jacketed stove or a central heating plant.

Fifth. A minimum of 30 lineal feet of blackboard space.

Sixth. A minimum sized classroom accommodating 25 pupils, allowing 15 square feet of floor space per pupil.

Non-standard rooms:

First. Any classroom in which one or more of the above points are not fully provided.

This standard applies only to the classrooms, and differs from the standards used by the State Board of Education for the distribution of State funds to accredited schools in that it does not include such factors as the training of the teacher, the number of pupils enrolled, the length of the school term, etc.

A total of one hundred and twenty-one questionnaires was mailed to the division superintendents of the State; of this number one hundred went to division superintendents in counties and twenty-one to division superintendents in cities. Ninety-one questionnaires were received from counties and twenty-one from cities, making a total of one hundred and twelve or 92.5 per cent included in the tabulation which follows:

Summary of Results from Ninety-one Counties

ROOMS FOR ELEMENTARY CLASSES (GRADES 1-7)	White	Colored	Total
1. Total number standard classrooms in use.....	5,538	995	6,533
2. Total number pupils enrolled in standard classrooms.....	166,486	34,253	200,739
3. Total number non-standard classrooms in use.....	1,934	1,589	3,523
4. Total number pupils enrolled in non-standard class-rooms	53,886	60,932	114,818
5. Total number pupils in grades 1-7.....	220,372	95,185	315,557

ROOMS FOR HIGH SCHOOL CLASSES (GRADES 8-12)	White	Colored	Total
1. Number of classrooms:			
a. Standard.....	1,638	57	1,694
b. Non-standard.....	123	21	144
2. Number of science laboratories:			
a. Standard.....	133	4	337
b. Non-standard.....	77	5	82
3. Number of home economics laboratories:			
a. Standard.....	157	12	169
b. Non-standard.....	24	8	32
4. Number of shops:			
a. Standard.....	108	19	127
b. Non-standard.....	12	6	18
5. Total number of high school teachers.....	2,004	100	2,104
6. Total enrollment in high school.....	34,731	1,512	36,243
Total number of standard classrooms and laboratories erected since 1920	3,364	735	4,099
Approximate cost of standard classrooms and labora-tories erected since 1920.....	\$10,902,100	\$1,213,149	\$12,115,249
Number of classrooms discarded since 1920.....	1,459	181	1,640
Number of classrooms not now in use.....	247	38	285

Analysis of Results From Counties

The following facts in the above tabulation as reported by the division superintendents are significant:

1. Of a total of 7,472 rooms used by white pupils and 2,584 rooms used by colored pupils in the elementary grades, 1,934 rooms, or 25.8 per cent, and 1,589 rooms, or 61.4 per cent, respectively, are classified as non-standard.
2. Twenty-four and four-tenths per cent of the white enrollment and 64 per cent of the colored enrollment in the elementary schools, as reported by the division superintendents, are housed in non-standard rooms.
3. There are 1,761 classrooms used by white pupils and 78 classrooms used by colored pupils in high schools, of which 123 rooms, or 6.9 per cent, and 21 rooms, or 26.9 per cent, respectively, are classified as non-standard.
4. In the high schools used by white pupils there are 711 rooms used as science laboratories, home economics laboratories and shops; in the high schools used by colored pupils there are 54 such rooms. Of these numbers

there are 113 rooms, or 15.9 per cent, and 19 rooms, or 35.1 per cent, respectively, which are classified as non-standard.

5. Since 1920 there have been 1,640 rooms discarded on account of being unfit for use. Of this number, 1,459, or 88.9 per cent, were rooms used by white pupils.

6. In the counties there is a total of 12,659 standard and non-standard classrooms, laboratories and shops in use by elementary and high-school pupils, white and colored. In addition there is a total of 285 such rooms not now in use.

7. Since 1920 there have been constructed for white pupils 3,364 classrooms and laboratories, at an approximate cost of \$10,902,100, or \$3,240 per room; during the same period there have been constructed for colored pupils 735 classrooms and laboratories at an approximate cost of \$1,213,149, or \$1,650 per room. In some cases the cost of auditoriums is included in these figures.

Summary of Results from Questionnaires in Twenty-two Cities

ROOMS FOR ELEMENTARY CLASSES (GRADES 1-7)	White	Colored	Total
1. Total number of standard classrooms in use.....	1,599	414	2,004
2. Total number of pupils enrolled in standard class- rooms	57,519	17,484	75,903
3. Total number of non-standard classrooms in use.....	129	243	372
4. Total number of pupils enrolled in non-standard classrooms	4,409	10,999	15,408
5. Total number of pupils in grades 1-7.....	61,928	28,483	90,411

ROOMS FOR HIGH SCHOOL CLASSES (GRADES 8-12)

1. Number of classrooms:			
a. Standard	751	138	889
b. Non-standard	24	12	36
2. Number of science laboratories:			
a. Standard	79	9	88
b. Non-standard	5	3	8
3. Number of home economics laboratories:			
a. Standard	60	20	80
b. Non-standard	9	6	15
4. Number of shops:			
a. Standard	41	11	52
b. Non-standard	9	3	12
5. Total number of high school teachers.....	1,011	187	1,198
6. Total enrollment in high school.....	24,517	5,275	29,792
Total number of standard classrooms and laboratories erected since 1920	1,004	276	1,280
Approximate cost of standard classroom and labora- tories erected since 1920	\$10,055,890	\$1,697,099	\$11,752,989
Number of classrooms discarded since 1920.....	116	55	171
Number of classrooms not now in use	84	11	95

Analysis of Results From Cities

The following facts in the above tabulation as reported by the division superintendents are significant:

1. Of a total of 1,719 rooms used by white pupils and 657 rooms used by colored pupils in the elementary grades, 129 rooms, or 7.5 per cent, and 243 rooms, or 36.9 per cent, respectively, are classified as non-standard.

2. Seven and one-tenth per cent of the white enrollment and 38.6 per cent of the colored enrollment in the elementary schools, as reported by the division superintendents, are housed in non-standard rooms.

3. There are 775 classrooms used by white pupils and 150 rooms used by colored pupils in high schools of which 24 rooms, or 3.1 per cent, and 12 rooms, or 8 per cent, respectively, are classified as non-standard.

4. In the high schools used by white pupils there are 203 rooms used as science laboratories, home economics laboratories and shops; in the high

schools used by colored pupils there are 52 such rooms. Of these numbers there are 23 rooms, or 11.3 per cent, and 12 rooms, or 23.1 per cent, respectively, which are classified as non-standard.

5. Since 1920 there have been 171 rooms discarded on account of being unfit for use. Of this number 116, or 67.8 per cent, were rooms used by white pupils.

6. In the cities there is a total of 3,556 standard and non-standard classrooms, laboratories and shops in use by elementary and high school pupils, white and colored; in addition there is a total of 95 such rooms not now in use.

7. Since 1920 there have been constructed for white pupils 1,004 classrooms and laboratories at an approximate cost of \$10,055,890, or \$10,015 per room; during the same period there have been constructed for colored pupils 276 classrooms and laboratories at an approximate cost of \$1,697,099, or \$6,148 per room. In some cases the cost of auditoriums is included in these figures.

From the above data two things are significant; first the public schools of Virginia are in need of more and better classrooms, and, second, progress has been made since 1920 in the construction of school buildings.

In the promotion of this movement for better school buildings the State Board of Education has been a contributing factor. It has maintained since 1920 a division of school buildings which has been rendering, free of cost to the several communities, valuable service to the school building program of the State.

The work of this department is based on two fundamental principles:

First. The construction of school buildings lends itself to certain uniformity which, if observed, will result in efficiency and economy. Such uniformity need not, and should not, destroy desirable individuality in the needs and the style of architecture in different communities. But it does call for information and supervision which are the result of specialized study, training and experience.

Second. School buildings are the product of the expressed educational needs of the people, who, on the whole, wish for their children the best which they can afford. But they are untrained and uninformed in securing the thing which they need and desire. It is imperative, therefore, that they have the services of some agency which is free from any monetary consideration and which can provide them with the advice, encouragement, technical information and supervision which they should have and which the situation makes possible.

The concrete results of this department in so far as they can be tabulated in terms of building construction are shown in the summary which follows. It should be pointed out, however, that this department rendered additional assistance which is not and cannot be included in this tabulation.

Buildings Erected from Plans of and Supervised by the Division of School Buildings, State Board of Education, Since September, 1920

	White	Colored
I. Number of school buildings.....	206	19
a. Heating plants:		
Central	131	7
Stoves	75	12
b. Toilet facilities:		
Indoor	116	7
c. Character of construction:		
Frame	57	12
Brick	148	7
Stone	1	0
II. Number of standard classrooms (including science and home economic laboratories).....	1,255	76
III. Seating capacity (pupils)	44,838	2,750
IV. Number auxiliary rooms, including library, office, restroom, etc.....	229	19

Buildings Erected, etc.—Continued

	White	Colored
V. Auditorium:		
a. Number buildings with auditoriums.....	138	5
b. Seating capacity	72,960	2,325
	White	Colored
VI. Distribution of service:		
a. Plans and specifications only.....	41	0
b. Plans, specifications and supervision.....	165	19
Note.—In addition supervision was provided for four buildings for white and forty-six buildings for colored, for which plans and specifications were provided by other agencies.		
c. Special projects—heating plants, alterations, repairs, etc.	24	2
	230	21
VII. Cost to community for buildings and projects.....	\$4,549,440	\$249,510

Note.—No charges against county are made for plans, specifications, or supervision.

In the foregoing tabulation the following facts are significant:

I. During this period 225 schools with 1,331 standard classrooms providing seats for 47,588 pupils, and 143 auditoriums providing seats for 75,285 persons, have been planned and supervised for the white and colored schools in Virginia.

II. In addition 45 projects, such as installation of heating plants, alterations, repairs, etc., have been planned and supervised.

III. This building program involved an expenditure of \$4,798,950, for which the local communities were not charged with the cost of plans, specifications and supervision. If the architectural work involved in this expenditure had been done by any other than a central agency the cost to the community would, without doubt, have been considerably greater, and not as satisfactory.

IV. While the number of stoves and out-door toilets in this group of buildings is larger than should be expected, yet they represent improved conditions, for the reason that they have been constructed under standardized and sanitary conditions. These two factors have been markedly unsatisfactory for the reason that sanitary regulations had not been observed in their construction.

V. It is significant that 63.5 per cent of this group of buildings which averaged slightly less than six rooms (classrooms and laboratories) have auditoriums in addition to their standard classroom facilities. The people are beginning to see the educational and social need of the auditorium.

It is also significant that, of the 206 buildings for white children, 72.4 per cent are of brick or stone construction. One of the great needs in the school building situation is the abandonment of the cheap, frame construction which, in far too many instances, is not painted and repaired from time to time in order to keep it a habitable place for children.

VI. According to the reports of the division superintendents, 4,368 classrooms and laboratories for white pupils, and 1,011 classrooms and laboratories for colored pupils have been constructed since September, 1920. Of these numbers 1,255 rooms, or 28.7 per cent, and 76 rooms, or 7.5 per cent, respectively, have been planned and supervised by the division of school buildings.

School Buildings in Relation to School Enrollment

The annual report of the State Superintendent, for the school year ending June, 1927, in twenty-one cities and ninety-one counties from which questionnaires were received from the division superintendents shows the following enrollment:

	COUNTIES	Grades 1-7	Grades 8-12
White		271,064	35,671
Colored		110,716	1,819
Total		381,780	37,490
	CITIES	Grades 1-7	Grades 8-12
White		68,782	21,388
Colored		30,499	5,124
Total		99,281	26,512

These data on enrollment are used in determining the results which follow rather than the data on enrollment as reported by the division superintendents at the time the questionnaire was taken, for the reason that they are in all probability more indicative of actual conditions. The questionnaire was taken at a time when official reports on enrollment had not been received by all of the division superintendents.

On the basis of these enrollment figures the average number of pupils per room in classrooms now in use (standard and non-standard) is as follows:

	COUNTIES	Grades 1-7	Grades 8-12
White		36.3	20.3
Colored		42.9	23.1
	CITIES	Grades 1-7	Grades 8-12
White		40	27.6
Colored		46.4	31.6

These averages represent present conditions. They are based on the present classroom capacity now in use. Of this classroom capacity 26.1 per cent is classified as non-standard.

In order to ascertain the classroom capacity which the State of Virginia should provide for her enrollment, thirty-five pupils per room in the elementary schools and twenty-five pupils per room in the high schools have been adopted as a basis. The figure of thirty-five pupils per room in the elementary schools is the commonly accepted standard in school practice. The figure of twenty-five pupils per room in the high schools is the enrollment for teaching purposes recommended by the Association of Colleges and Secondary Schools of the South, which will determine the size of the room.

On the basis of these figures the total enrollment in the schools of Virginia according to the annual report of the State Superintendent for the school year ending June, 1927, demands the following standard classrooms:

	COUNTIES	Grades 1-7	Grades 8-12
White		7,744	1,427
Colored		3,161	73
Total		10,905	1,500
	CITIES	Grades 1-7	Grades 8-12
White		1,965	855
Colored		871	205
Total		2,836	1,060

From the above tabulation there is needed a total of 10,905 classrooms for the counties and a total of 2,836 classrooms for the cities to provide adequate classroom facilities for the pupils in grades one to seven, and there is needed a total of 1,500 classrooms for the counties and a total of 1,060 classrooms for the cities to provide adequate classroom facilities for the pupils in grades eight to twelve.

When the number of standard classrooms as reported by the division superintendents is deducted from the total number of classrooms needed for the school enrollment as indicated in the above summary, the following standard classrooms are needed:

	COUNTIES	Grades 1-7	Grades 8-12
White	2,206	211	
Colored	2,166	16	
Total	4,372	227	
	CITIES	Grades 1-7	Grades 8-12
White	375	104	
Colored	457	67	
Total	832	171	

From the above summary it will be seen that, in addition to the standard classrooms now available, a total of 4,372 standard classrooms for the counties and 832 standard classrooms for the cities are needed for the pupils in grades one to seven in order to give them adequate classroom facilities, and a total of 227 standard classrooms for the counties and 171 standard classrooms for the cities are needed for the pupils in grades eight to twelve in order to provide them with adequate classroom facilities.

The average number of white and colored pupils per room in grades eight to twelve in the counties is 20.3 pupils and 23.1 pupils, respectively, which is smaller than the basis—25 pupils per room—used in determining the number of classrooms needed in the counties to provide classroom facilities for the enrollment in grades eight to twelve. Even though this average is smaller than the basis used, there is a need for 211 classrooms in which to house the white high school enrollment and 16 classrooms in which to house the colored high school enrollment. Therefore, in order to provide high school facilities for the present high school enrollment, white and colored, in the counties much consolidation must be perfected beyond that which has already been accomplished. Unless such consolidation takes place, considerable financial outlay will be required over that necessary to provide the 211 rooms for white high school pupils and the 16 rooms for colored high school pupils.

School Buildings in Relation to School Census

The school census for 1925 as compiled in the office of the State Board of Education is as follows:

	COUNTIES	Pupils 6-14 years, inclusive	Pupils 15-18 years, inclusive
White	285,504	104,260	
Colored	129,944	45,859	
	CITIES		
White	75,668	30,581	
Colored	34,488	12,647	

If Virginia should attempt to provide public education for all pupils from six to eighteen years of age classified on the basis of ages six to fourteen, in-

clusive, and fifteen to eighteen, inclusive, which is the basis of classifications in many States, the following classrooms would be required:

COUNTIES		
	Classrooms for ages 6-14	Classrooms for ages 15-18
White	8,157	4,170
Colored	3,712	1,834
Total	11,869	6,004

CITIES		
	Classrooms for ages 6-14	Classrooms for ages 15-18
White	2,162	1,223
Colored	985	506
Total	3,147	1,729

To provide classroom facilities for the pupils six to eighteen years of age as reported by the school census, a total of 22,647 classrooms would be required as opposed to the total of 16,301 classrooms necessary to provide classroom facilities for the enrollment in grades one to twelve. This is a total of 11,529 classrooms, in addition to the total of 11,120 standard classrooms now in use.

CHAPTER LXV

EDUCATIONAL AND VOCATIONAL GUIDANCE

By way of introduction to recommendations for vocational and educational guidance in Virginia, the following data from the Ninth Yearbook of the National Association of Secondary School Principals may be presented:

The principles of guidance as herein presented are treated from the standpoint of the teacher, school administrator, vocational counselor, parent, social, civic, and religious worker, and personnel worker in employment. Upon these workers, according to their opportunity, must rest the responsibility of vocational guidance.

A Definition of Terms

1. The term "vocational" comprises all gainful occupations, as listed in the United States census of occupations, and homemaking.

2. Vocational guidance is the giving of information, experience, and advice in regard to choosing an occupation, preparing for it, entering it, and progressing in it.

Educational guidance is the aid furnished individuals in making such decisions as choice of studies, choice of curriculums, and the choice of schools.

The Need for Vocational Guidance

1. In this country fully 50 per cent of our children leave school by the end of the sixth grade; 25 per cent more by the end of the grammar school; and over one-half of those who enter the high school leave before graduation. Vocational guidance, then, is needed to keep a larger number of children profitably in school and to facilitate their leaving under conditions favorable for worthwhile employment.

2. Within about forty years time the population of our country has doubled, the number of our racial elements has greatly increased and our cities have become overcrowded. Within the same time our occupations have greatly increased in number, technically, complexity, and specialization. Within the same time the typical American family has become less capable than formerly to give vocational direction to its children; the public school has had difficulty in keeping pace with the changed needs of our cosmopolitan population, and society at large has failed to understand and assume responsibility for the vocational choices of our young people. Organized vocational guidance must be provided to meet the new needs of our modern world.

3. Education is provided to enable pupils to become useful members of society. Vocational guidance will prepare them to make more wisely the important decisions which they are called upon to make throughout life. Therefore the service of vocational guidance should be provided for in the curriculums of the public schools.

4. Since work occupies one-half the waking time of active individuals and presents complex difficulties which can be solved only through the extension of education, careful study should be given to all the problems involved in vocational life.

5. Modern life demands as never before right contacts and cooperation. Vocational guidance of some sort is inevitable. No one can avoid the need for making occupational decisions. Adequate guidance should be provided under supervision to offset the unwise and false guidance of untrustworthy advertisements, suggestion, selfishness, ignorance, and other prejudiced or unscientific sources.

The Aids of Vocational Guidance

The purposes of vocational guidance:

1. To assist individuals in choosing, preparing for, entering upon, and making progress in occupations.

2. To give a knowledge of the common occupations and of the problems of the occupational world, so that pupils may be prepared for vocational as well as political citizenship.

4. To secure better cooperation between the school on the one hand and the various industrial, commercial, and professional pursuits on the other hand.

5. To help adapt the schools to the needs of the pupils and the community, and to make sure that each pupil obtains the quality of opportunity which it is the duty of the public schools to provide.

The Content of Vocational Guidance

1. Drifting through school is a common evil in all educational systems, as in life itself. The vocational motive, whether temporary or permanent, should be encouraged as one of the motives in the securing of useful experiences and in the choice of a curriculum.

2. The home and school programs should include a combination of play, handwork, cooperative activity, and academic work, the whole being varied enough to represent life's demands, and concrete enough to secure an effective response and successful accomplishment by each individual child. For all children before the close of the compulsory school period there should be provided a wide variety of try-out experiments in academic and aesthetic work, gardening, simple processes with tools and machines, elementary commercial experiences, and cooperative activities. Such try-out experiences are for the purpose of teaching efficiency in everyday tasks, broadening the social and occupational outlook of the children, and discovering to them and the teachers their interests and abilities.

3. Children in school should be dealt with on the basis of individual differences revealed in the social life of the child, progress in school subjects, and in standard tests.

4. Teachers of all subjects in schools and colleges should make a definite effort to show the relation of their work to occupational life just as they now relate studies to other phases of life activity, such as the cultural, recreational, ethical, civic, and social.

5. The miscellaneous working experiences of school children should be made to aid the child in understanding his environment and in discovering his vocational aptitudes and interests.

6. All forms of part time education, such as the continuation school, and cooperative courses, and trade extension and trade preparatory courses, should be provided, in order that school and work may be brought into closer co-operation and that there may be more careful supervision of the child in employment.

Methods in Vocational Counseling

1. *Studying the Individual:*

(a) Counselors should interview individuals at regular intervals, particularly at such critical times as one year before the school leaving age, promotion from one school to another, change of course, leaving school, and when meeting the problems connected with work. Such counseling should include studies by case work methods of the social life of each child and conferences with parents whenever practicable, in order to obtain knowledge of the child's environment, interest, behavior, and personal data regarding his problems. This counsel should be a regular responsibility of the school. For the solution of difficult cases all the facilities of the regular case work method should be available.

(b) Special attention should be paid, by the school or by suitable agencies or individuals, to adults whose guidance has been neglected, and to handicapped persons.

(c) Counselors should study the educational offerings of the community through its schools, museums, art galleries, libraries, etc., in order to enable

children and adults to use these opportunities in preparation for a vocation or for further school or college training.

(d) Whenever tests of general intelligence are used this should be done with the greatest care. No important decision should be made on the basis of a group test alone; special classifications and assignment of special curriculums should be made only after an individual examination by a carefully trained and experienced psychologist. Whenever time and facilities permit, test of occupational skill and knowledge should also be used.

(e) Cumulative records should be kept for individuals. These should include academic records, social conditions, physical and mental records, and the result of counseling.

2. Teaching the Occupation:

(a) The study of the common and local occupations, vocational opportunities, and the problems of the occupational world, should be carried on before the end of the compulsory school age. Such study should be provided, in organized classes, for all students in junior high and high schools. It should give the pupil an acquaintance with the entire field of occupations, and a method of studying occupations wherewith he can meet future vocational problems. In addition the study of occupations should be offered in continuation schools, evening schools for adults, and colleges.

(b) Teachers of classes in occupations, counselors, or investigators should be given time to study occupational needs and opportunities.

3. Aiding in the Choice of a Vocation:

(a) The choice of a vocation should not be made too early or too hurriedly and should be made only after the study of occupations and try-out experiences. It should be an educational process by progressive elimination. Provision should be made for reconsideration and rechoice. Care should be taken that the choice be made by the individual himself.

(b) Vocational guidance should discourage and supplant any attempt to choose occupations by means of phrenology, physiognomy, or other unscientific hypotheses.

(c) Alluring short cuts of fortune, as represented by current advertisements, should be investigated, condemned, and supplanted by trustworthy information and frank discussion.

(d) Occupations should be chosen with service to society as the basic consideration, and with personal satisfaction and remuneration as next in consideration.

4. Guidance in Relation to Vocational Education:

(a) Vocational guidance must be provided before, during, and after courses in vocational education if these courses are to be truly effective. Students in vocational courses should be enrolled only after careful selection on the basis of fitness and well considered choice.

(b) In order that the aims of vocational guidance may be secured, those in charge of vocational education should include a study of the common occupations and their problems in any plan of vocational education.

(c) In accordance with the best practice among those in charge of vocational education, plans should be adopted by which vocational education and education for citizenship may be continued in factories, shops, and stores, enabling workers to understand the problems of work and to make progress toward a better organization of working life and a better standard of living.

(d) It is desirable that in connection with vocational education, opportunities be provided for experiences in the vocation under occupational conditions. There should be vocational guidance in connection with the assignment to, and the procedure within, such occupational experiences.

(e) Adult education, both vocational and general, should be provided through a variety of short-unit courses in day and evening schools.

5. Retaining the Student in School:

(a) Since investigations have shown that economic necessity is only a minor cause for leaving school at the end of the compulsory school age, those interested in vocational guidance should always insist that the school itself enter into a campaign to hold pupils by offering a more varied program suited to the individual needs of the students.

(b) Between the compulsory school age and the time for full participation in industry, there should be substantial compulsory part time schooling in the daytime.

(c) Means should be found, through either public or private funds, to provide scholarships when needed to keep pupils in school, or for continuing school on a part time arrangement.

6. Guidance in Relation to Employment:

(a) The choice of a position or vocation should take into consideration the physical condition and mental attainment of the young person and the future offered by the occupation.

(b) Placement should come only after a careful and persistent effort has been made to keep the pupil in school, and whenever possible it should be in part time work for a substantial period.

(c) Placement and employment supervision should be accompanied by advice regarding opportunity for supplementary study and promotion. Placement should always be regarded as but one of the later steps in a complete program of vocational guidance.

(d) Vocational guidance workers should cooperate with personnel managers, labor organizations, employers' associations, cooperative societies, government officials, social and civic organizations, and others interested in problems of work.

(e) School system should undertake follow-up work and employment supervision, to extend throughout the time of the minority of the child and to be exercised in cooperation with the above-mentioned agencies. For several years after leaving school students should be encouraged to keep in touch with the vocational counselors of the school system to which they formerly belonged.

(f) Noncommercial and public employment agencies for persons under twenty-one years of age should be conducted jointly with the local educational authorities and in the closest possible relation with the public schools. For the purposes of standardization and coordination, private noncommercial agencies for aiding persons to secure employment, or to transfer them to more suitable positions, should be under public supervision or control. Commercial employment bureaus, even under a licensing system, should be supplanted as rapidly as possible by public employment systems.

The Organization and Administration of Vocational Guidance

1. The organization required for vocational guidance will depend in large measure upon the size of the community which it serves and upon the existence of other organizations capable of rendering supplementary service. A small organization, or even a single individual, can handle the work in a small place, but large cities will require fully equipped bureaus for vocational guidance.

2. The central agency should receive advice and assistance from an advisory council, from special research committees, and from counselors.

3. The advisory council should be composed of interested individuals or of representatives of organizations whose activities relate them to the work of vocational guidance. It should advise in planning the vocational guidance activities adapted to the community and should be helpful in enlisting the cooperation needed when gathering information or when making placements.

4. Research, by persons qualified by experience and training, should be carried on to give assistance in solving such special problems as those connected with the guidance and protection of mentally or physically handicapped children, with aiding foreigners to adjust themselves to American conditions, with the promotion of the health of women workers, and with the gathering of information needed for legislation.

5. Vocational counselors are needed in schools or other institutions whenever there are persons whose satisfactory guidance requires many individual conferences.

6. Since vocational guidance must concern itself chiefly with young persons found in the public schools, and since this activity is related closely to the general economic welfare of the community, it is advisable that the agency undertaking this work should be a part of, or closely affiliated with, the publicly supported educational system. This will promote the coordination of vocational guidance activities with the work of attendance and certification officers, and of persons giving physical and mental tests, and of persons engaged in developing means of supplying school children with vocational information and education.

7. The intelligent interest and cooperation of all teachers should be secured, by means of teachers meetings, reading circles, and institutes.

The Equipment and Training of Vocational Counselors

1. Since the service of vocational guidance is of such growing importance and of such a peculiar nature, it is evident that it should be given only by persons having the necessary personal qualities and special experience and training.

2. The personal qualities of the vocational counselor should include human sympathy, interest in and understanding of young people and their problems, tact, patience, the spirit of service, and research ability.

3. The counselor should have a good general education, including the study of economics, sociology, industry, psychology, and education.

4. The counselor should have experience in various forms of social endeavor, such as public school teaching, social work, and personnel work in industrial and commercial establishments.

5. The counselor should have special training for the work in a formal course or courses in vocational guidance of a college or university grade. These courses should be organized under such major topics as the following: The Principles of Vocational Guidance; Vocational Counseling; Organization for Vocational Guidance; Occupational Information, Research, and the Survey; The Conduct of Life-Career Classes; Psychology Applied to Vocational Guidance; Special Problems in Vocational Guidance.

Guidance in Virginia

A Questionnaire was sent to one hundred and eight division superintendents of schools, five hundred high school principals and one hundred and four teachers in colleges. There were two hundred and twenty-six replies:

Number of superintendents replying, forty-four, or forty per cent.

Number of high school principals replying, one hundred and twenty-six, or thirty-seven per cent.

Number of college teachers replying, forty-six or forty-three per cent.

Following is the summary of answers, all of them affirmative. There were no negative answers.

Do you think that the program of work for our public schools should make definite provision for educational and vocational guidance?....	223
(a) Efficient use of school time—directed study	212
(b) Health and physical activities	202
(c) Discovery of special interests	190
(d) Discovery of individual differences in traits and abilities	197
(e) Guidance in the selection of subjects and courses	208
(f) Guidance in social and civic activities	151
(g) Guidance in making vocational choices	183
(h) Guidance in acquiring vocational and occupational information	191
(i) Providing exploratory experiences	131
(j) Personal counseling	202
(k) Assistance in placement	143

(l) Check proper person to administer guidance program (Several checked more than one)	
1. Superintendent	135
2. County supervisor	11
3. School principal	135
4. Director	116
5. Grade teacher	51
(m) Should the school budget contain provision for a guidance program	166
(n) Is it practicable and advisable to secure and keep records of each pupil to aid in guidance.....	201
(o) Is it practicable and advisable to use educational and mental tests as a help in guidance	181
(p) Can provision be made for counseling pupils	171
(q) Can the school make systematic provision for vocational information to be used as a basis for guidance.....	149
(r) Have you one or more teachers who are naturally adapted to become counselors	124
(s) Should a counselor have special training for the work of counseling	165

Answers to the questionnaire revealed the fact that Maury High School, Norfolk, Virginia, has a rather complete plan of vocational and educational guidance in charge of a special counselor, and the following high schools have definite guidance work as a part of their program: Danville, E. C. Glass, Lynchburg, Great Bridge, John Marshall, Lawrenceville, Morrison, Schoolfield, Waverly, West Point, and Whitmell Farm Life School.

There were fifty other schools that reported having some guidance work but no very definite program.

Conclusions

The obvious conclusions to be drawn from this inquiry are:

(1) Those who are in charge of the administration of public education in Virginia are practically unanimous in the opinion that the program of work for our public schools should make definite provision for educational and vocational guidance.

(2) They are practically unanimous also in believing that supervised study should form a part of every guidance program.

(3) In their judgment every item in the suggested program of guidance is desirable and it is feasible to incorporate them all where conditions warrant.

(4) It seems to be the general opinion also that a guidance program should be administered by the person or persons who have other administrative duties. I interpret this to mean with the cooperation of the individual teacher.

(5) It seems to be the opinion of a majority of those answering the question that the school budget should contain provision for a guidance program.

(6) The weight of opinion is also in favor of a counselor with special training for the work of counseling.

Recommendations

(1) Since the administrative officers are practically unanimous in their desire to incorporate guidance work in the program for the schools, and it is shown by the questionnaire that only a small percentage of the schools of Virginia have a definite guidance program, it is recommended that the State Board of Education, with the cooperation of a committee of division superintendents and high school principals, make a more extended investigation of this subject than has been possible in preparing this report, with a view of preparing a suggestive program of educational and vocational guidance for different types of schools. It is clear that the small rural schools cannot have as complete a program as the larger consolidated schools or the city school systems. Therefore, definite programs should be prepared for each type and incorporated in the high school courses of study. Suggested forms for keeping records should also be prepared so that there will be more or less uniformity in the records kept, which is very desirable in the case of transfer of students from one school to another.

(2) Since the individual teacher will have a large share in any program of guidance, and the concensus of opinion of those answering the questionnaire favors trained counselors, it is recommended that teacher training institutions incorporate in their courses of study for teachers instruction in the principles and practices of educational and vocational guidance.

(3) It is also recommended that summer sessions offer special courses for teachers in guidance work.

(4) Intelligent educational and vocational guidance requires in addition to a knowledge of the student, a very comprehensive knowledge of vocations of all sorts and the opportunities offered in them. The needed investigations are of such a scope and should be continued over so long a period as to call for support from some permanent foundations with financial competence for the maintenance of research and experimental work of very extensive nature. Such research has been carried on for several years by the Southern Woman's Educational Alliance in an investigation of occupations for women, and the result has been published in the most authoritative publication on occupations for women that has yet been made. This organization has for the past two years been conducting a study of rural girls, the result of which will be published shortly. This report suggests what should be done in an investigation of the needs of rural girls. It should be undertaken by some research agency for all classes of pupils in our high schools. The recommendations contained in the report are of value because they represent the combined opinion of most of the agencies in this country which have to deal with the subject.

(5) Each school should make systematic provision for vocational information to be used as a basis for guidance by assembling in its library books and pamphlets on vocations. Much of this material can be obtained at small cost from government bureaus, such as the Bureau of Education, Bureau of Child Welfare of the Department of Labor, Bureau of Standards, Department of Commerce and the Federal Board for Vocational Education. Different industries of national scope publish descriptive bulletins which may be had upon application. In addition to these a few books on single occupations as well as groups of occupations should be added to the library. No library should be without the recent publication of the Southern Woman's Educational Alliance—"Occupations for Women." An excellent bibliography on the choice of an occupation is published by Washington and Lee University. One of the best and most recent books on educational and vocational guidance, by William Martin Proctor, of Leland Stanford Junior University, contains a full bibliography on the subject.

This library material should be supplemented by talks from recognized leaders in various vocations.

CHAPTER LXVI

SCHOOL HYGIENE AND HEALTH EDUCATION

In the survey report presented to the Virginia Education Commission in 1919, the following recommendations on school hygiene and health education were made:¹

1. That provision be made for hygienic and sanitary school houses as recommended in Chapter XVII.
2. That provision be made for the whole time services of a competent person, who, working under the joint auspices of the State Department of Education and the State Department of Health, shall have general supervision of school hygiene and sanitation, physical education, and medical inspection and supervision in the public schools of the State.
3. That the present (West) law be so amended as to require that each superintendency division (county or city) employ the full time services of at least one school nurse or school physician.

Recommendation No. 1, above, evidently referred primarily to section 5 of the summary at the close of Chapter XVII, which reads as follows:²

That a supervisor of buildings be employed by the State Board of Education to devote his entire time to the inspection of plans and specifications for school buildings, and the inspection of same when erected, and that it be illegal for any building to be erected until his approval of the plans and specifications is filed in writing with the division superintendent.

Constitutional Provision

The Constitution of the State of Virginia gives authority to the State Board of Education to make all needful rules and regulations for the management and conduct of the schools, which, when published and distributed, shall have the force and effect of law, subject to the authority of the General Assembly to revise, amend, or repeal.³

Physical Examination and Health Instruction Provided For

In order to promote proper physical examination of school children and health instruction in the schools of Virginia, the General Assembly, upon the recommendation of the State Department of Education, has passed legislation as follows:⁴

1. The Superintendent of Public Instruction shall prepare or cause to be prepared, upon the advice and approval of the State Board of Health, suitable test cards, blanks, record books, and other needful appliances, to be used in testing the sight and hearing of the pupils in the public schools, and shall also obtain necessary instructions for the use thereof, and shall furnish the same free of expense to all the schools of the State, upon the request of the school board of any county or city, accompanied with the statement from the clerk thereof that the said board had by resolution adopted the use of said cards, blanks, *et cetera*, and had directed the use thereof in schools under

¹Virginia Public Schools Education Commission's Report to the Assembly of Virginia, Chapter XII, p. 196.

²Same report, Chapter XVII, p. 240.

³Virginia School Laws, Supplement No. 1, July, 1923, p. 5, section (2) c (3); and p. 11, section (5).

⁴Virginia School Laws, p. 46, section (e) ff.

their charge, and within fifteen days after the beginning of the term, or after receiving the said test cards, *et cetera*, the principal or teacher in all said schools shall test the sight and hearing of all the pupils under their charge, and keep a record of such examinations in accordance with instructions furnished, and whenever a pupil is found to have any defect of vision or hearing, or disease of the eyes or ears, he shall forthwith notify the parent or guardian, in writing, of said defect, with a brief statement thereof. Copies of said reports shall be preserved for the use of the Superintendent of Public Instruction, as he may require.

2. Be it enacted by the General Assembly of Virginia, That the board of supervisors of the several counties and the councils or other governing bodies of the several cities and towns be, and they are hereby, authorized to make appropriations out of the county, city or town funds, as the case may be, to provide for the health examination and physical education of school children and the employment of school nurses, physicians and physical directors, and such appropriations shall be placed to credit of the county or city, or town school board. Previous to employment, all said nurses, physicians, or physical directors shall be approved by the Health Commissioner of the Commonwealth and the State Superintendent of Public Instruction.

(1) That an amount not exceeding one-half of the annual salary of each physical director appointed in accordance with section one of this act may be paid by the State Board of Education to the local school trustees employing such physical director, and an amount not to exceed one-half of the annual salary of each nurse or physician appointed in accordance with section one of this act may be paid by the State Board of Health to the local school trustees employing such nurse or physician.

(2) That after the first day of September, nineteen hundred and twenty, all pupils, in all the public elementary and high schools of the State, shall receive, as part of the educational program, such examination, health instruction, and physical training as shall be prescribed by the State Board of Education and approved by the State Board of Health, in conformity with the provisions of this act.

(3) In order that the teachers of the Commonwealth shall be prepared for health examinations and physical education of school children, every normal school of the State is hereby required to give a course, to be approved by the Superintendent of Public Instruction and the Health Commissioner, in health examinations and physical education, including preventive medicine, physical inspection, health instruction and physical training, upon which course every person graduating from a normal school must have passed a satisfactory examination, and every normal school certificate shall, therefore, indicate as a prerequisite a knowledge of preventive medicine, physical inspection, health instruction, and physical training.

(4) The State Board of Education, with the approval of the State Board of Health, shall establish regulations whereby on or after September, nineteen hundred and twenty-five, no applicant may receive a certificate to teach in the schools of this State who does not present, first, satisfactory evidence of having covered creditably an approved course in general physical education in a training school or course for teachers recognized by the State Board of Education as a school or course in good standing. But the State Board of Education may modify or waive entirely the requirements of this section whenever in its opinion such modification or waiver is necessary to prevent the impairment of the teaching force of the public school system.

(5) The State Board of Education, with the approval of the State Board of Health, shall appoint a supervisor of physical education qualified and authorized to supervise and direct a program of hygienic instruction and physical education for the elementary, secondary, and normal schools of the State, and shall appoint such other employees and authorize such expenses for personal service, printing, and so on, as may be necessary to the proper and effective administration of the program authorized by this act.

Persons suffering from contagious diseases shall be excluded from the public free schools while in that condition. Every teacher and pupil shall, within ten days after entering a public free school, furnish a certificate from a reputable physician certifying that such teacher or pupil has been successfully vaccinated, or is entitled to exemption by reason of peculiar physical condition; but nothing in this section shall preclude a school board from requiring immediate vaccination in case of an epidemic of smallpox, or the annual revaccination of those who have not furnished certificates of proper vaccination. The operation of so much of this section as concerns vaccination may be suspended in whole or in part by the school board of any city or county.

Regulations Adopted by the State Board of Education.

To carry out the provisions of the Acts of the General Assembly in 1920, as stated above, the State Board of Education adopted the following regulations:¹

(1) All instruction in the public schools shall give appropriate emphasis to physical training. At specific periods each day, proper physical exercises shall be arranged for the development of the pupils of the schools.

(2) Every student shall be given a physical examination as near the opening of school as possible, to determine in general his physical condition. These examinations shall consist of the testing of the sight and hearing of pupils, shall give the record of weights, shall attempt to ascertain the condition of nutrition, and shall include attention to teeth. In addition, teachers are required to note the breathing of pupils in order to report throat and nasal obstructions. These examinations must be simple and must deal with these physical defects which will become apparent through simple physical tests.

(3) In all cases where physical defect of any sort is found, reports must be made to parents on appropriate forms. Where medical attention seems to be necessary, teachers should urge parents to give immediate consideration to this need.

(4) All teachers in the public schools are required to observe strictly the rules and regulations adopted by the State Board of Health in order to prevent the spread of disease. Particular attention must be paid to the sanitary conditions of the schoolhouse to see that the rooms are clean, are well ventilated, and are conducive to good health. Especial care should be taken to see that the privies of the school are of the sanitary type and are kept in a sanitary condition.

The foregoing Constitutional and statutory provisions, and the State Board of Education regulations provide a satisfactory basis of authority and agency for an effective and ever expanding program of physical and health education. The State Board of Education is authorized to pass additional regulations and requirements needed from time to time to further perfect the system and adapt it to changing conditions incident to growth and new discoveries.

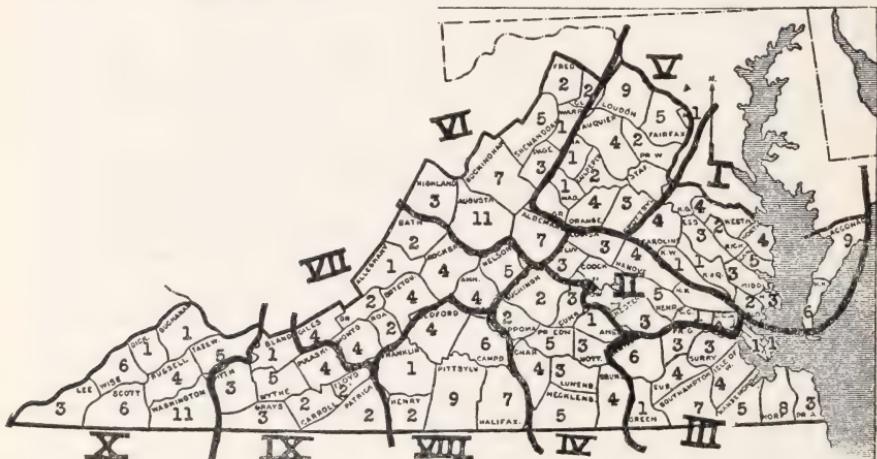
¹Virginia School Laws, p. 48, sections 1, 2, 3, and 4.

Present Organization of Health Work in the Public Schools

After the passing of the West law in 1920, which created the division of physical and health education, the supervision of the two subjects was divided at the request of the State Department of Education, this department believing that the State Board of Health was, at that time, better prepared to direct the health educational program. In 1922 a woman was employed jointly by the State Board of Education and the State Board of Health to supervise the health educational program at the teacher training institutions.

The supervision of both physical and health education was conducted by these two departments jointly until July, 1925, when the supervision of health education was taken over by the State Department of Education. Since that date, the supervision of both physical and health education has been under the division of physical and health education in the State Department of Education, which puts the responsibility for supervision upon the educational department, leaving the State Board of Health responsible only for providing health service, such as clinics, preparation and distribution of health subject-matter material, etc.

During the spring of 1927 the State Board of Education approved a program of reorganization providing that the State be divided into ten districts with an average of ten counties each. Each of these districts, except district two, is in charge of a supervisor of physical and health education under the general supervision of a State supervisor of physical and health education. District two, composed of the counties near Richmond, is directly supervised by the State supervisor. The following map shows the district division at present.



The new organization, though it has been in effect approximately only two months, is already obtaining gratifying results. From five to twenty schools have already been reached in each of the one hundred counties of the State and there are reasons to believe that very definite and encouraging results have already been obtained in all schools visited. The State supervisor reports that, without exception, the division superintendents are very appreciative of the assistance rendered by the district supervisors, and school principals and teachers have likewise responded in a most gratifying way.

It is recognized that it will be impossible for the district supervisors to cover their respective fields in a thorough manner due to the large number of schools and the great distances to be covered in each district.

When the district supervisor visits a school, he emphasizes the importance of the State course of study in health education, the five-point program, etc. He also endeavors to have some faculty member selected to be responsible for carrying out, under his direction, the health educational program for the entire school. After

leaving a school the supervisor fills out reports on the county report sheet which is then forwarded to the State Department.

Major Objectives of the Present School Year

The State supervisor of physical and health education reports the major objectives for the present school year as follows:

1. To obtain a more complete and accurate annual physical inspection of the school enrollment.
2. To stimulate more activity in the correction of physical defects through promoting the five-point program, which designates the minimum requirement for a physically fit school child.
3. To get the physical and health education period definitely established in the school program and improve the utilization of the period as outlined in the State course.
4. To encourage better hygienic conditions in school buildings and surroundings.
5. To get firmly established fire regulations and drills.
6. To promote group physical and health activities embracing the entire school enrollment.

It will be noted especially that this program is concerned primarily with a more effective execution of the present system. The writer is convinced from his study that the plan being followed is both practical and wise because when it is once fully administered great good will result. Furthermore, a careful study of the operation of the present system by the district and State supervisors will provide a more effective basis for determining what changes, if any, should be made in the present system.

The Department of Health Education at Work

The West law provides that all teachers in the public schools of the State of Virginia shall make an inspection very early in the school year of all children attending school and report their findings to the division superintendent of schools, who, in turn, reports to the State office. The following report card shows the items considered in making this examination. It will be noted that the report calls for the number of children enrolled in school, the number inspected, the number with defects, including under weight, teeth, eyesight, hearing and throat. The teacher must also report the number of children that have not been vaccinated.

Teachers Physical Inspection Report

P. O.

To the Division Superintendent

..... Date

County	White	Colored
Number children enrolled.....
Number children inspected.....
Number children with defects.....
Number children under weight (10% or more).....
Number children with defective teeth.....
Number children with defective eyesight.....
Number children with defective hearing.....
Number children with defective throats.....
Number children unvaccinated.....

..... Teacher-Principal
..... School

Teacher—Fill out and hand to school principal.

Principal—Consolidate reports of teachers and forward to superintendent.

INDIVIDUAL RECORD OF ANNUAL PHYSICAL INSPECTION (State of Virginia)

(This card to follow pupil from time of entrance until completion of Elementary Grades)

Full Name	Address	Sex	Race	Vaccination	Year	County	School
<i>Check by ✓ after Name of Disease each Disease Pupil has had: Measles Scarlet Fever Mumps Smallpox Chicken Pox Malaria (Chills) Whooping cough Diphtheria Typhoid</i>							
CODE: O—No Defect—X—Defect; For Eyes: Record the number of the line on Eye Chart that pupil reads at twenty (20) feet. Check (✓) Defects Treated.							
Year of Inspection	19...	19...	19...	19...	19...	19...	19...
Condition	Treated	Condition	Treated	Condition	Treated	Condition	Treated
Grade							
Age in years only							
Height in inches							
Weight							
Underweight							
Teeth							
Vision—Right							
" Left							
Hearing—Right							
" Left							
Throat							
Posture (Good—Fair—Poor)							
Date Pupil checked as "5-Pointer"							
Notices to Parents							
Remarks:							

An individual record of annual physical inspections for each pupil must be kept on the accompanying individual record card. It will be noted that this record, when properly kept, will present a fairly complete history of the child's physical development.

Notice to Parents

Following the annual inspection, the teachers report their findings to the parents on the following form. Attention should be called to the paragraph in this form advising the parents that the defects noted tend to interfere with the child's progress in school and may seriously interfere with his or her health. The parent is urgently advised to consult the family physician, dentist or other specialist in order that the defects may be corrected.

Virginia Physical Inspection of School Children

Notice Sent by Teachers to Parents

Year of 192.....

Name of pupil
on inspection appears to have the condition checked below:

Under weight	Defective hearing	Unvaccinated
Defective teeth	Mouth breathing	
Defective vision	Skin eruption	

Any of these conditions tends to interfere with the child's progress at school and may seriously impair his health. Some of them threaten the health and lives of other children. You are, therefore, urgently advised to consult your family physician, or dentist, or a good specialist, as the case may require.

Teacher.....
School.....

Report of Correction of Defects

Later in the school year the teacher reports to the school principal, and he in turn to the division superintendent, the correction of physical defects. The form used by the principal in making his report to the superintendent is given below.

Report of Correction of Defects

By Teachers

To the Division Superintendent of Schools:

For school year 192.....

Number children with eyesight corrected.....	Principal.....
Number children with hearing corrected	School.....
Number children with teeth corrected	County.....
Number children with tonsils and adenoids corrected.....	
Number children gained in weight up to normal.....	
Number children successfully vaccinated	
Number children with one or more defects corrected.....	

State Board of Health

Summary Report of Annual Physical Inspection from 1923-24 to 1925-26

In the annual report of the State Superintendent of Public Instruction for the school year 1925-1926 the following figures are given:¹

COUNTRIES	CITIES
1923-24, 88.3 per cent on enrollment inspected	1924-25, 71 per cent of enrollment inspected
1924-25, 91.8 per cent of enrollment inspected	1925-26, 73.4 per cent of enrollment inspected
1925-26, 93.2 per cent of enrollment inspected	

During 1925-26 five counties reported that one hundred per cent of their school enrollment was inspected.

Considerable interest has been stimulated by the adoption of what is called the "Five-Point" scale for determining physical development. A published pamphlet answers clearly the following questions: (1) What is the Five-Point Child? (2) How do we find the Five-Point Child? (3) Why have this Five-Point standard for children? (4) How can the child be instructed in reaching the Five-Point standard?

It will be noted that the Five-Point standard is based upon those factors that are fundamental in determining the physical basis of success, both in and out of school, namely vision, hearing, teeth, throat and weight. Weight, of course, is an index of proper nutrition.

An effort is being made to have defects corrected before the children enter school, by having all preschool children who expect to enter school register in the fall or early spring preceding school entrance. It is recommended that such examination be made in the presence of parents with the defects indicated and corrections advised. After such a program is successfully carried out much will be done to reduce physical defects when children enter school.

The School Health Program

An effective school health program will usually include the following points:

- (1) Any one or more activities which are introduced into the school routine with the definite idea of promoting the health of the individual child and teaching him valuable lessons about putting health habits into daily practice.
- (2) Careful attention to sanitation and a safe water supply, with special stress upon the individual drinking cups, and keeping grounds and buildings clean and wholesome.
- (3) Attention to community health by means of clean-up campaigns, etc.

The "Five-Point" Child

One result of the annual physical inspection of school children in Virginia during the past five years is the evolution of a definite idea of what constitutes physical fitness; and the child reaching the present minimum standard is called a "Five-Point" child, because, according to the inspection, he has measured up to the following requirements:

- (1) *Vision*: A child reads line marked number "20" on the Snellen eye testing chart at a distance of twenty feet (each eye tested separately), or has glasses which are properly fitted.
- (2) *Hearing*: Child hears conversational voice at a distance of twenty feet (each ear tested separately).
- (3) *Teeth*: Child has no stained teeth or unfilled cavities.
- (4) *Throat*: Child has no symptoms of trouble with tonsils and adenoids; not a mouth-breather. (Preferably checked by a doctor.)
- (5) *Weight*: Child is not ten per cent or more under weight nor more than twenty per cent over weight.

¹Annual Report of the Superintendent of Public Instruction, school year 1925-26, p. 36.

This Five-Point plan seems to appeal to both teacher and child. There was a discouraging number of defects, but the idea of inducing children to measure up to this minimum standard seems to have inspired new hope. It is explained to the children by drawing on the board a five-point star.

Once the child reaches the five-point standard he feels it his duty not to fall below, and as a result becomes interested in practicing health habits such as eating candy only as dessert, drinking milk instead of coffee or tea, sleeping the proper amount of time according to his age, and with windows open, and if under weight a nap in the day, brushing his teeth daily, and going to a dentist at least once a year.

The Five-Point groups were honored in various ways. The way that proved most interesting was the kodak picture group made for the State album kept in the office of the State Board of Health. In some counties the five-point children were given blue ribbons at their county school fair, and in other places they were selected for prominent places in health programs, especially on May Day or Child Health Day.

In one county, an interested citizen offered fifty dollars to the school that would reach the highest percentage of Five-Point children within a given time. The rural school that won the prize reached 53 per cent.

Mouth Hygiene and Dental Clinics

Mouth hygiene and dental service are arranged for by the State Board of Health. These clinics are conducted on a jointly cooperative basis as the State Board of Health does not consider it a good plan to give corrective dental service free to children financially able to pay for such service. A charge of fifty cents per cleaning, and fifty cents for each separate filling and extraction, is made.

Under this plan the State Board of Health finds that the difference between the amounts contributed by the children and the total cost of the clinic in each county amounts to approximately one hundred and five dollars per month which is made up jointly by the State and the county, thus making the cost to each approximately fifty dollars per month.

A trained staff of dentists is maintained in the State Board of Health. The work of the department has been endorsed every year since its beginning by the Virginia State Dental Association and the report of the work is made to this association as a part of the regular order of business.

This service is offered to Negroes as well as to whites, but, so far, not enough interest has been shown by the Negroes to warrant the employment of one full time Negro clinician, though a Negro dentist has been attached to the staff for the past six years. For the past five years the department has averaged twelve white clinicians.

The State Department of Health has purchased necessary equipment which it rents to the counties at a nominal figure. The clinics are operated in connection with the schools. During the past school term clinics were held in twenty-six of the one hundred counties in the State and the following is a summary of the work done and the cost of operation:

Number of children examined	24,713
Number of children treated	9,610
Total number of operations	31,436
Average number operations per child ..	3.3
Total cost of clinics	\$21,886.68
Amount contributed by children	11,925.25
Net cost of clinics	9,961.43
Gross cost per child .....	.238
Net cost per child .....	.103
Amount reimbursement by State	4,029.24
Cost to State per child .....	.418
Cost to State per operation .....	.128

Communicable Disease Prevention in the Public Schools

In the physical inspection report of 1925-26 it was found that 111,802 children were reported as not having been vaccinated. During the year, 86,188 were vaccinated for smallpox. This number was a definite increase over the number vaccinated in 1924-25. One reason for the slowness in getting children vaccinated in schools is probably the fact that local school boards are, under the law, allowed to control the enforcement.

In counties maintaining health units or nursing services there were 298 toxin-antitoxin clinics held during 1925-26, with 9,741 children immunized against diphtheria. During the year ending June, 1927, the number treated with toxin-antitoxin was increased to 62,043 due to the activity in the counties maintaining the health units and nursing services.

During the session of 1926-27, 242,177 children were reported with physical defects in the counties of Virginia. Corrections of defects were as follows:

Vision	7,188
Hearing	1,851
Teeth	40,024
Throat	4,051
No. gaining weight within the 10 per cent ..	22,921

These figures show that those responsible for the health work in the schools have been extremely active and that the cooperation with which they have met has been most favorable.

Table 64 presents a comparison for the school years of 1925-26 and 1926-27 for both counties and cities.

The accompanying photographs give some idea of the methods followed to stimulate interest among the children in the health education program, much individual and school pride being exhibited in showing growth in the number of Five-Point pupils each year. It is especially interesting to note that the Rockland School in Warren county, Virginia, reached the ideal during last session, showing that it is possible to have a 100 per cent Five-Point school.

Health Training and Instruction

The health training and instruction as outlined herein are offered merely as a guide, with appreciation of the fact that Virginia teachers have been prepared in the subject of school and personal hygiene.

Health training is more important than any designated course of study. Needs, whether they be individual, school or community, vary, making it difficult to outline a definite course for all.

The aim should be to train every Virginia school child in proper health habits so that he may not only be free from preventable disease, but possess a reserve force of strength and energy—in other words, be a member of a group of physically fit children.

The teaching of health is not best done by the question and answer method except when it is correlated with some other subject. Healthful living is brought about by practice, and practice establishes habit-forming; mere knowledge will not form a habit. Health training should foster the development of right physical and mental ideals and attitudes with regard to health.

It must be remembered that the community forms an integral part of your health program; this includes boards of health, health units, nurses, family and school physicians, and the parents; relationship with them must be friendly and informal.

It is generally recognized that most children who are ten per cent or more underweight have either bad living habits or physical defects.

The annual physical inspection should be made at the beginning of the school year and of late pupils upon their enrollment.

The inspection should be made by the teacher; it will give a sympathetic understanding of the physical condition of the pupils and enable her to use her influence to have physical defects corrected, and better determine other health needs of her group.

The findings of the inspection should be recorded on the individual record cards and report made on proper form to principal or superintendent.

Daily Inspections

Nothing should be allowed to interfere with this inspection being given the first thing in the morning; much can be done in this way to check disease and prevent epidemics. Flushed face, inflamed eyes, running nose, cough, and skin eruptions can be noted quickly in addition to the usual inspection for cleanliness, etc.

This inspection will serve as a guide for your health habit-forming procedure. If a children's health league is formed to assist in this part of the inspection it will serve as a stimulant and help greatly in obtaining results.

The following progression as outlined in the State course of study for rural and elementary schools has given good results:

Begin with inspection of hands, nails, and handkerchief the first month, and each month add successively: Face; neck and ears; teeth; scalp; handkerchief as to cleanliness; posture.

Correlation of Hygiene with Other Subjects

To Correlate With Physical Training Lessons. Counting the pulse before and after vigorous exercise; discussing the effect and reason. Counting respiration before and after an exhilarating exercise; discussing the cause and effect. Explaining how certain exercise helps to improve posture and what effect poor posture may have on general health.

To Correlate With Composition and English Works, With Subjects Such as— Why should we sleep with windows open? Why should we practice the various health habits? Special health activities in school or community, etc.

To Correlate With Civics. School, community or city water supply. Rural or city sewage disposal. Milk supply. Surveys of dairies, creameries, stores, markets, etc. Oral reports on current health items in papers and magazines.

To Correlate With Arithmetic. Estimates on comparative cost of health and sickness; figuring height and weight averages; cost of food and similar problems.

To Correlate With Geography. Comparison of home life and sanitary conditions of different nations; effect of modern sanitation in Panama and some of the European countries.

To Correlate With History. Causes and effect of the great plagues and pestilences of past centuries. Development of hygiene and sanitation during the past years, and men who have given their lives to it. (Pasteur, Trudeau, etc.)

To Correlate With Home Economics. Nutrition as connected with disease or physical defects. Proper selection of food to preserve bodily health. Choice of clothing in regard to circulation and over fatigue. Value of the hot lunch and group eating.

Rules for Health Living

Sleep with windows open.
Brush teeth before going to bed and in the morning.
Drink at least three glasses of water daily.
Drink milk or water instead of coffee or tea.
Eat some fruit and green vegetables each day.
Wash your hands before each meal.
Take one or more baths a week.
Play out of doors each day.
Avoid using a common drinking cup.
Have a bowel movement every day.
Obey the two State Board of Health rules:
 Bow your head or cover your nose and mouth when you sneeze or cough.
 Keep pencils, fingers, and everything except food and toothbrush out of your mouth.

Training of Teachers to Administer Requirements of the West Law

The West Law places upon all teachers in the public schools of Virginia the responsibility of making annual physical examinations of school children. In order that the teachers may be prepared to administer these requirements, courses have been organized in all institutions training an appreciable number of teachers. All applicants for teacher's certificates are required to present credit for the West law course. Such teacher training courses now cover instruction in physical inspection of school children, community hygiene for detection and control of communicable diseases, personal hygiene, accidents and emergencies, hygiene of instruction, care of school plant, and health of the teacher.

The interest manifested by the teachers is most gratifying and the examinations tend to prove that those taking this course have really assimilated the information.

At first, medical men and some of the laity were of the opinion that a physical examination by the teacher would mean very little and that only doctors should perform this service. However, in the opinion of those responsible for the inauguration of this program there are good grounds for the contrary view. The educational and public health authorities do not presume to look for minor defects and ailments, whose discovery would demand the skill of highly trained medical practitioners. The teacher, if properly instructed, can make inspection that will bring to light the major and most important defects. The later professional examinations made by family physicians and specialists will bring out the minor factors.

From the standpoint of education, the directing of the attention of all teachers of the importance of an early correction of the major physical defects will insure a continuous physical inspection program, since the teacher trained to make such inspections will always be on the lookout for new developments. Furthermore, the expense necessary to provide an adequate system of examination by professional practitioners would delay the inauguration of such a program.

Summary

1. The present provisions of the State Constitution, State laws, and State Board of Education regulations seem to be quite adequate for the organization and execution of an effective program for the promoting of health education of school children.
2. The State Boards of Education and Health are to be commended for their splendid cooperation in the past in developing the present system of health education in Virginia.

3. The present system of district organization providing a District Supervisor of Physical and Health Education for each of the ten districts is a step forward, and with wise cooperation from local school authorities and teachers should promote more effective work in the rural schools.

4. It must be recognized, however, that the district supervisors can be expected to provide leadership and supervision only, leaving the daily execution of the program to the regular teaching staffs.

5. The administration of the West law has more than justified the hopes of those responsible for its adoption. While great progress has been made during the last few years in the discovery and correction of physical defects and the training of teachers to perform their part in the program, there is much yet to be done.

6. The future policy of the department of physical and health education should be to increase the effectiveness of the present program rather than to contemplate immediate changes. The ideal should be so to educate both pupils and parents that no remediable physical defects may remain uncorrected. In cases where parents cannot bear the expense of the medical treatment necessary for the correction of the defects, the State should assist in providing the service. Civic and community organizations also should be encouraged to cooperate.

7. At the present time no provision is made for compulsory physical examination of teachers. An annual physical examination should be required of all teachers in their own interest as well as that of the pupils. Such service could be supplied by the county and city health departments in case teachers desire free service.

8. A standard system of summary record forms should be adopted in order that dependable comparisons showing progress in the correction of each class of defects may be made.

9. The successful development of the program of physical and health educations will require increased funds. These should come from two sources: (1) An increase in the State appropriation; and (2) more adequate appropriation by local authorities. All appropriations, whether State or local, should be looked upon as investments in community health and future prosperity both individual and State.

CHAPTER LXVII

PHYSICAL EDUCATION IN THE PUBLIC SCHOOLS

Previous to the present arrangement, or to this year, there was only one supervisor of physical education in the State. With the present arrangement the supervisory force is able to cover the whole State as far as the supervision is concerned. At the present time the supervisor of physical education takes one of the divisions and at the same time is the director of the whole supervisory force of the ten divisions. These directors of physical education have their own cars, and the cooperation with the division superintendents of the State thus far has been 100 per cent.

There were forty-four (44) directors of physical education last year scattered over the State, of which six were in counties and thirty-eight in cities. These directors received aid from the State until this present year, when the State aid was taken away and the money used for the pay of the present ten directors who act as supervisors for the whole State. Thus the counties and cities which had physical directors lost the State aid, but they lost only one physical director in the above list of forty-four. Thus the cities and counties have retained the same organization, paying their directors from local funds. In the present arrangement the help from the State goes for the supervision of the rural and smaller schools which heretofore received no help in physical education.

Practically all of the teachers have met the requirements of the State law which provides for teacher training in physical education. Since the passage of the West law in 1920 the teachers have been preparing to meet the requirements set by the State in order to handle physical education on a higher plane than has ever been attempted in this State.

Fully 85 per cent of the pupils are participating in group athletic activities where physical directors are employed.

The per cent of enrollment inspected increased from 31 in 1921 to over 90 in 1927.

The year's program in physical and health education, beginning with the school term in 1927:

1. To have annual inspection reports in within one month after the opening of the last school—and a supplementary report within one month of the opening of the second term.
2. To have the Five-Point program (weight, teeth, vision, hearing, and throat) started immediately after the completion of the annual inspection, and certificates duly awarded to the children.
3. To get the physical and health education period definitely established in the school program and to improve the utilization of the period as outlined in the State course.
4. To encourage better hygienic conditions in school buildings and surroundings.
5. To promote group activity embracing the entire enrollment.
6. To get firmly established fire regulations and drills.
7. To obtain a complete report on correction of physical defects at the end of the school year.

To aid in checking up on the above program each supervisor in the field has a score card which is too extensive to print here but I will mention the main points of same to show that the work is being checked up as accurately as possible. The score card contains in the main the following items: Total number of teachers visited, school attitude in physical education, school attitude in health education, minutes per week allotted both in the elementary and in the high schools, daily inspection, toilets, water safe, per cent in major sports—high school girls and high school boys, per cent in group athletics, acreage in play space, loose equipment, number of Five-Point children, hygienic condition, and individual record cards.

In all the State courses of study pertaining to physical education there are the following:

In the elementary schools—grades 1-7, inclusive.

1. Inspect teeth for cavities, for decaying food, etc.
2. Test the vision by the Snellen eye-testing card.
3. Test hearing by ordinary conversational voice twenty feet away.
4. Weigh and measure each child and compare results with standard classroom weight record.
5. Examine throat for diseased tonsils, etc.

The findings to be placed on permanent record cards, defects checked and sent to the parents on individual notification cards.

Where schools have school nurses, they are to follow up the inspection and to help to induce parents to have corrections made.

Then, too, a daily inspection is to be made in the elementary schools. This to be taken up in the morning period preferably just after the opening exercises—inspect hands, nails, face, ears, neck, teeth, scalp, handkerchief. These points to be discussed from time to time.

Cleanliness talked about, especially in the primary grades. Proper care. Cracking hard substances with the teeth causes them to break off and decay to set in. Proper food to make good teeth. Water, use to the body, inside, outside.

When the fifth, sixth and seventh grades are reached, the pupils are given a text book on physiology and hygiene.

In the secondary schools—grades 8-11 inclusive:

1. The annual inspection of the pupils for ascertaining the common defects detrimental to health, growth, and development.
2. The daily inspection of pupils for detecting symptoms of illness, for encouraging health habits for the control of personal and public health, and for observing measures of the daily health control in and about the school plant.
3. In motor activities of physical education, emphasis is placed on the racially-old motor activities in order "to secure their inherent values for the development of the fundamental, intellectual, emotional, nervous, and organic powers underlying efficiency in life."

The correctional work is under the supervision of the State Board of Health in Virginia. A health manual for teachers is published and given to all teachers.

Virginia has made ample provision for physical education in that she is one of fifteen States listed in 1927 which has a State director. Virginia has had a director of physical education in the State Board of Education for several years. Within the past year the State has been divided into ten districts with a physical director in each district. These directors together with the State director get together and work out plans for the direction of the work which is carried out under the direction of the State director.

Physical education has been deemed so imperative by the General Assembly of the State of Virginia as to be required in all public schools as a regular part of the school curriculum. The State Board of Education has given this subject a definite time allotment in the elementary course of study. In addition, it is necessary that physical education be graded as other school subjects if it is to take equal rank with them.

Two lessons given daily (physical training)—one in the morning and one in the afternoon—with a minimum of ten minutes each, should be given daily—outdoors when the weather permits; indoors with the windows open when the weather is inclement.

Then, second, organized play—during recess games, contests, etc., should be taught and supervised. As much time as possible after school should be devoted to athletics for a third part of this physical education.

Also, the State Board of Education publishes and distributes an elementary course of study in physical education and health education which includes formal exercises (calisthenics) and informal story plays, folk games and dances, etc.

The work in the normal schools—State teacher-training courses show a marked improvement from year to year. Practically all are using courses of study which have been prepared by the State. This is bringing about more unity in the presentation of the program throughout the field.

In order to secure a more accurate idea of physical education in the State, a questionnaire was sent out to 1,000 public school teachers, principals, and superintendents in ten counties, as follows:

Alebemarle	Henrico	Greenville	Rockingham	Smyth
Caroline	Isle of Wight	Charlotte	Rockbridge	Wise

The questionnaire should be printed next in the report.

Result of Questionnaire Study

Five hundred and fourteen questionnaires were filled out, and the results are shown below:

1. Is continuous record kept showing physical condition of each student? *Ninety to ninety-five per cent.* What use is made of this record? *Check-up yearly corrections filed.*

2. Are physical efficiency tests given? *Scarcely any.* How frequently?—By whom? *Teacher.* What tests are given? *Five-Point, eyes, ears, teeth, etc.*

3. Do efficiency tests determine amount or kind of work student is permitted or required to take? *Some, yes; some, no.*

4. Are corrective gymnastics given students needing same? *Fifty per cent, yes; fifty per cent, no.* Who gives them? *Teacher.* How frequently are they given? *Daily, yearly, and monthly.*

5. Remarks (value of) concerning corrective gymnastics.

6. Is physical education required every day of all students while in school? *Ninety per cent, yes.*

7. What proportion of total day's work is devoted to plays and games? *One-eighteenth to one-fifth.*

8. What proportion of total day's work is devoted to physical education? Men: *One-twenty-fourth to one-eighteenth.* Women: *one-twenty-fourth to one-eighteenth*

9. What proportion of total day's work is devoted to gymnastics and calisthenics? *One-twenty-fourth to one-eighteenth.*

10. What per cent of buildings are equipped with gymnasiums? *None.*

11. What per cent of buildings are equipped with adequate playgrounds? *Sixty per cent.*

12. What per cent of pupils have training in gyms every day? *None.*

13. What per cent of pupils play out of doors every day? *Ninety-five to ninety-seven per cent.* What plays? *Various ones listed.*

14. What per cent of your schools have organized play every day? *Fifty per cent.*

15. What type or kind of physical education is emphasized in (a) primary grades; (b) intermediate grades; (c) grammar grades; (d) high school? *Follow State course of study here.*

16. What per cent of your teachers have had training for physical education? *Seventy-five to eighty per cent.*

17. What per cent of your schools are equipped with a physical director? *None.*

18. What is emphasized in your physical education—gymnastics, calisthenics, or plays? *Most answer—calisthenics and plays.*

19. What per cent of your pupils have access to—school physicians? *Thirty-five per cent.* Nurses? *Thirty-five per cent.* Dentists? *Thirty-five per cent.* Mouth hygienists? *None.*

20. What per cent of your high schools have military training? *None.*
21. What per cent of boys over fourteen years of age participate in military training? *None.*
22. Average number of minutes per week given to physical education in grades, —I.—90; II.—87; III.—89; IV.—80; V.—90; VI.—89; VII.—98; VIII.—104.

The results of this questionnaire show that the teachers of the State are attempting to follow implicitly the instructions contained in the course of study set up and sent out by the State.

The data show that from 95 to 97 per cent of the pupils in the schools—especially rural schools—in the State of Virginia play out of doors every day in the school year; that the amount of work in physical education as shown in questions 8, 9, and 10, is followed according to the time allotted in the course of study; that from 75 to 80 per cent of the teachers in the State have fulfilled the requirements to handle physical education (nearly 100 per cent have already fulfilled the requirements of the West law); that the time allotment shown in question 22 on the average is about the average for the schools of the United States.

The present arrangement of having the supervisor of physical education in the State Board of Education, and of having him carry out the health education program through the State department is the best method.

After the present school year is completed, some way of testing the physical education program should be set up. This should include the points mentioned in the monthly score card used by the physical directors in the ten districts of the State, and should take into consideration three important points, as follows:

1. Physical vigor of pupils (about 50 points).
2. Correction of remedial defects (about 20 points).
3. Health habits (about 30 points).

CHAPTER LXVIII

VOCATIONAL AGRICULTURE IN HIGH SCHOOLS

Development of the Work

Prior to the passage of the Smith-Hughes act in 1917, there were eleven agricultural high schools in Virginia. These were known as congressional district agricultural high schools and agriculture was taught in them. The work was not strictly vocational although the students were required to do some work on the school farm in addition to their class work. The classroom work was not "tied up" with the farm problems of the students. There was too much work with test tubes and trip scales and too little plowing, pruning, feeding, and the like.

The 1918 session of the Virginia legislature appropriated funds to match Federal Smith-Hughes funds, a State Board for Vocational Education was created (whose personnel is the same as that of the State Board of Education), a supervisor of agricultural education was appointed, vocational agriculture.

The object of the work is the training of farmers. Any person over fourteen years of age who is farming or contemplating engaging in farming may enroll in a class in vocational agriculture.

This type of work has grown tremendously during the past ten years. The following table will serve to show this growth:

Summary of Ten Years' Work in Vocational Agriculture in Virginia

SESSION	NUMBER OF SCHOOLS				Enrollment	Salaries Paid	Total Profits from Students Work
	All Day	Day Unit	Part Time	Evening			
1917-1918....	18				229	\$ 20,529 78	
1918-1919....	37				446	36,555 40	\$ 19,676 10
1919-1920....	47				800	70,650 90	21,585 88
1920-1921....	51				848	88,206 55	35,402 76
1921-1922....	61				1,175	99,371 67	41,252 68
1922-1923....	66	19		7	1,866	111,388 97	74,343 31
1923-1924....	78	32		8	2,178	154,093 00	103,958 25
1924-1925....	84	41		24	2,543	178,427 00	168,453 28
1925-1926....	106	38	4	72	3,702	223,112 18	203,894 06
1926-1927....	111	45	18	84	4,433	233,449 48	281,978 55

It can be seen that vocational agriculture has become a real factor in rural education. Within ten years the teaching staff has grown from eighteen to one hundred and fourteen. Of these, ninety-three are white and twenty-one are negro instructors. During the session 1926-1927 vocational agricultural classes were conducted at two hundred and fifty-eight points. The enrollment has grown from 229 to 4,443, and the enrollment per teacher is 44.5. Virginia's rank on average number of pupils per teacher is fifth among the southern States and fourteenth in the nation. The figure for the southern States is 36.67 pupils per teacher. (Figures for 1925-1926.)

Types of Work

Perhaps it would be well, at this point, to define the types of work mentioned in the above table.

All-day work consists of five ninety minute periods of school work per week for thirty-six weeks and a minimum of 210 hours of supervised farming at home. Credit one and one-half units.

Day unit work calls for two or three ninety minute class periods per week for thirty-six weeks and a minimum of 210 hours of supervised farming at home.

Part time work is given to farm boys who have dropped out of school but who may be induced to return for agricultural training when farm work is not pressing. Meetings are held at a place and time most convenient for these boys. Allied subjects such as farm arithmetic and English usually supplement the agricultural course, which is a unit course. The students must carry out supervised farming just as the all-day students do. No school credit is given.

Evening classes are held for adult farmers, usually in the winter time, although a number of successful ones are running now. The farmers usually take up some farm enterprise, such as dairying or corn growing, and study improved methods of production and marketing. Improved practices are tried out on the home farm under the supervision of the teacher of agriculture. At least ten meetings must be held before this type of work can be reported to the State office. No school credit is given.

Activities of the Teacher of Agriculture

Due to the fact that home work must be supervised, the agricultural teacher is employed for twelve months. The agricultural student must do the thing he has studied about before the teaching process is complete, and the agricultural teacher must see that he does it right. Agricultural teachers, then, are busiest during the spring, summer and fall, for that is when most farm jobs are done. The average number of visits to each pupil is six.

Agricultural instructors, however, do not confine their activities to the groups they teach in schools. Their monthly reports show many individual services such as treating sick animals, advising farmers how to feed and market—in fact, almost every conceivable sort of help is asked of them. These individual services are recognized as the job of the county agent but some counties have no agent. Again, some farmers prefer the agricultural teacher because they or their sons have attended his classes. He must do some of these favors or "lose out."

Community Services

A complete record of community services were not kept by agricultural instructors prior to 1922-23. The men were rendering valuable service but there were no figures available to show to what extent these services were rendered.

Kind of service	1917-1918	1918-1919	1919-1920	1920-1921	1921-1922	1922-1923	1923-1924	1924-1925	Total	
Soils and crops.....							1,549	3,438	4,987	
Horticulture.....						684	1,157	2,982	4,823	
Animal husbandry.....						900	1,716	879	5,495	
Farm engineering.....						139	242	407	788	
Farm management.....						348	329	830	1,507	
Miscellaneous.....						810	454	1,381	2,645	
Total.....							2,881	5,447	11,917	20,245
Meetings and Fairs										
Fairs.....						10	36	70	12	128
Attendance.....						6,500	51,000	136,995	24,242	218,737
Meetings.....						32	733	330	1,469	2,564
Attendance.....						1,010	34,851	39,681	124,027	199,560

Forty agricultural instructors did good work with farmers' organizations last year. Thirty-four agricultural teachers organized and assisted their boys with buying or selling organizations. Ninety-three helped put on exhibits at fairs. An illustration of the good work done by some instructors is furnished by the Caroline County Certified Seed Growers Cooperative Association. The Pulaski County Cooperative Exchange is another good illustration of the influence a well-trained man may have upon a community. The following account of the work of the Caroline County Certified Seed Growers Cooperative Association is copied from the report of the State Supervisor of Agricultural Education to the Federal Board for Vocational Education:

"Farmers cooperative selling associations have come and gone in Caroline County, Virginia; The Caroline County Certified Seed Growers' Cooperative Association is still serving its members.

"In the spring of 1919 four boys in the vocational agricultural class in the Sparta High School, Sparta, Virginia, selected for their home practice work two acres, each, of Virginia soybeans to be grown and marketed for seed. The students realized that successful marketing was just as much a problem as successful production. As marketing was one of the jobs studied in the agricultural course, they decided that they would pool their beans and sell cooperatively. With the assistance of the agricultural instructor, and advertising in a farm paper, the beans were soon sold at a premium over the market price. The present organization developed from this small beginning. Today the association has thirty-nine members; markets 2,500-3,000 bushels certified Virginia soybeans, 1,500-2,000 bushels certified Abruzzi, and 700-1,500 bushels certified V. P. I. wheat. The association has a wide reputation for producing and marketing high quality seed.

"The present organization is incorporated; has a five-year contract with each member. The officers are president, vice-president, and five directors. The directors are elected each year. The directors elect the president and vice-president from their number. The association owns and operates a modern power cleaner and sells seed to wholesale and retail trade. All seed to retail trade is shipped in new bags branded with the brand of the association and sealed with a patent seal. Seed in sealed bags is guaranteed to be as represented. The demand for seed so far has exceeded the supply.

"The Caroline County Certified Seed Growers Cooperative Association is a member of the Virginia Crop Improvement Association. This is a State organization with head offices at Blacksburg, Virginia. The object is to encourage the production and distribution of high quality field seed. It sets certain high standards and all certified seed must meet these high standards. It employs men especially trained at the agricultural college in seed work to inspect each crop in the field. The seed from this crop is then inspected in the bin after harvesting. If it meets all requirements, it is certified and each bag shipped must carry the 'yellow tag' of the association.

"The agricultural instructor of the Sparta High School has been president and sales manager of the Caroline County Certified Seed Growers Cooperative Association since its organization. A well-educated, progressive young farmer, who is conveniently located to cleaner, has had charge of the cleaning and shipping at all times. It is largely due to the enthusiasm and diligence of this farmer that the reputation of the association for high quality seed has been obtained. He is paid only a small wage per hour for the time that he actually works. No officer receives salary.

"Members of the association meet each month or more often as the occasion demands. They know each detail of the sales and other items of the business. Although each member has signed a binding contract, the legal phase is a formality. It has always been the policy of the officers and members that full knowledge of every detail of the business, which means a democratic organization, would take the place of a legal contract. The success of this organization, at least, seems to have proved the soundness of this policy. No member has willfully broken his contract.

"The agricultural instructor is fortunate in having this successful organization to enable him to do some real teaching in cooperative marketing to his agricultural class. The Caroline County Certified Seed Growers Cooperative Association is conceded to be one specific result of the work of the agricultural students and the agricultural department of the Sparta High School. Thus the department has not only brought new money crops to the farmers of the community but has also enabled the farmers to secure a premium for their products."

Financing the Work

Vocational agricultural work is financed by Federal, State, and local funds. The Virginia Vocational Fund is used to pay for three types of vocational education: Vocational agriculture, home economics, and trade and industrial education. Sixty per cent of the combined Federal and State fund is now used for vocational agriculture. The local community pays one-third of the teacher's salary. The State helps the community to buy equipment and erect buildings to some extent but the fund for this purpose is insufficient to help any community very much.

Statement of the Vocational Fund for Agricultural Education for 1926-1927

Appropriations—

Federal	\$ 95,433.38
State.....	56,028.55
State, from trades and industries fund.....	4,000.00
Balance from State funds, 1925-26.....	11,211.49
Total	\$166,673.42

Apportionments—

	Total
Salary of director (3/5 from Agric. Edu. fund)	\$ 900.00
Salary of supervisor	3,750.00
Salary of two district supervisors.....	5,600.00
Salary of teachers, white.....	130,235.67
Salary of teachers, colored.....	21,199.96
Total	\$161,685.63
	161,685.63
Unappropriated balance	\$ 4,887.79
Over appropriated State funds in teacher training.....	4,436.52
Balance	\$ 451.27

Teacher training:

Appropriation—	
Federal	\$ 7,311.74
State	7,311.74
	\$ 14,623.48

Apportionments—

	Total	Federal	State
State supervisor's travel	\$ 1,000.00	\$ 500.00	\$ 500.00
District supervisors' travel (2).....	1,700.00	850.00	850.00
Travel of teachers to annual conference	1,300.00	650.00	650.00
Stenographer, supervisor's office	1,740.00	870.00	780.00
Stationery	500.00	250.00	250.00
Postage	260.00	130.00	130.00
Clerk—Dist. Sup. D. J. Howard	120.00	.....	120.00
Clerk—Dist. Sup. T. V. Downing.....	90.00	.....	90.00
Va. Poly. Inst. teachers' salaries.....	9,650.00	2,711.74	6,938.26
Va. Normal & Ind. teachers' salaries....	2,700.00	1,350.00	1,350.00
Total	\$19,060.00	\$ 7,311.74	\$11,748.26
Over appropriated in State funds			\$ 4,436.52

The per capita cost of instruction in vocational agriculture in Virginia is \$52.06 (1926-1927).

The per capita cost in the southern region in that same year was \$52.53. Perhaps this high cost of instruction may be explained as follows:

1. V. P. I. has an enviable reputation as a teacher-training institution insofar as agriculture is concerned and men who are trained there are much sought after by neighboring States. In order to keep her best trainees at home Virginia must pay them as much as they can get in other States.

2. The vast majority of agricultural teachers in Virginia are "full time" agricultural teachers. If they were required to teach other sub-

jects the per capita cost would be lowered but agriculture would cease to be vocational. Since no textbooks are used, every teacher needs a vacant period or two per day in which to plan lessons, select bulletins to be used as texts, take farm surveys, visit projects and the like.

3. The nature of the work requires that a man use an automobile twelve months per year.
4. The teacher teaches twelve months rather than nine.
5. Bad roads are responsible for the inability of some teachers to reach the fifty individuals that make a teaching load.
6. A few departments are poorly situated and the work in these schools should be discontinued.

Requirements for Agricultural Teachers in Virginia

1. Must have been reared on a farm.
5. Must be graduate of an agricultural college with nine session hours in education, including practice teaching.
3. Must attend one district conference and the annual State conference for agricultural teachers each year.
4. Must attend summer school every third year.

All white agricultural instructors in Virginia, save two, hold degrees from agricultural colleges. These two have been teaching a long time and are capable men. Twelve agricultural teachers have the master's degree and a majority of them have done graduate work. This is possibly the most capable group of teachers in the State. They are loyal and work hard. About seventy per cent of them were trained at the Virginia Polytechnic Institute. The others have come in from neighboring States. About twenty new teachers are required per year to take care of "drop outs" and to fill new departments. V. P. I. has not been able to meet the demand in the past but the enrollment in the agricultural education department there is growing and it is hoped that very soon V. P. I. will be able to supply Virginia communities with Virginia boys who know the local farming conditions.

The typical agricultural teacher has taught at least five years in Virginia.

Methods

The course of study in agriculture in any given high school in Virginia is based upon local agricultural conditions. The instructor makes a survey of fifty representative farms of the community. The survey includes production and marketing practices, yields, acreages, and the like. The survey is made every five years in order that the instructor may note any changes in farm practices and in order that he may measure the results of his teaching. During the past two years 3,975 farms have been surveyed in this manner. These data have been tabulated and summaries of local situations made. The summary shows the local farming situation and contrasts the results obtained by farmers using good practice with those using poor practice.

The farm survey having been made, the agricultural teacher submits his findings to an advisory council. With the help of this council he sets up his course of study. Needless to say, a course of study that will fit the needs of a community in the trucking section of Eastern Virginia will not prove adequate for the beef-cattle section of Southwest Virginia. The farm jobs to be taught in the Valley of Virginia are not the same jobs that confront the cotton and tobacco growers of Southside Virginia.

The course of study having been made up to fit local conditions, jobs are arranged in seasonal order upon the teaching calendar. For example: selecting seed corn in the field is a fall job; sharpening harrow teeth is a winter job; feeding baby chicks is taught in the early spring. Summer jobs are taught near the end of the school year. This plan is followed in Vir-

ginia because it makes the teaching step "application" easy and because supervised practice work demands it.

The instructor submits a copy of his annual plan of work, including the course of study, to the State supervisor for approval. Another copy is furnished the division superintendent. These officials send back their approval or their constructive criticisms.

The agricultural teacher, having made out the course of study for his particular community and for his particular group of boys, supplies himself with duplicate sets of government bulletins and extension bulletins in order that he may have an adequate supply of teaching material for the jobs to be taught. He checks his equipment list to be sure he has the laboratory equipment. He is ready to teach.

Every job to be taught requires careful planning. Preparation, presentation, application, and testing out—the four steps in teaching—must be planned. Certain findings of the farm survey may furnish motivation for the lesson. The fact that the boys are confronted with a certain job in their home work is usually sufficient motivation. The presentation step is usually planned on the job analysis basis. During the recitation the boys are given opportunity to lead the group—to develop leadership. Supervised study is used to supplement group experience. A definite decision is reached as to how to do the job. Practice in doing the job is given wherever possible. Testing out is done on the home farm under the supervision of the teacher. This is not a word picture of an ideal situation, but it represents truthfully the typical situation in Virginia.

Farm shop is taught just as other jobs are taught. The farm shop course is based upon a survey of home needs. Practical construction and repair jobs are taught. No effort is made to turn out skilled carpenters, blacksmiths and mechanics but the shop courses are so constructed, for the most part, that a boy is taught to do the construction and repair jobs that need doing on the farms of his community.

Teaching efficiency compares very favorably with other States. Virginia's standing in this respect cannot be given because no measuring device has been set up. The Federal Board for Vocational Education scores the Southern States on fourteen factors, however, and Virginia ranks fifth according to this scoring device.

Every student enrolling in vocational agriculture must agree to carry out on his home farm certain definite supervised practice enterprises. A high grade of work is being done by these students. During the past year they grew 5,800 acres of crops and cared for 2,700 head of live stock and 40,000 fowls. The profits from these enterprises amounted to \$282,000.00. At the present time students are farming 7,000 acres of land as well as caring for 3,600 head of live stock and 100,000 fowls. Following two dry years, Virginia has just enjoyed a good crop year and the writer anticipates that the students of vocational agriculture will show a profit close to one-half million dollars this year.

The labor income of students in vocational agriculture compares favorably with that of the best farmers. The figures given below are for the years 1923-1924-1925:

CROP	Labor Income Per Acre	Avg. Farmer	Avg. Student
Corn	\$15.23	\$31.96	
Potatoes	63.93	62.82	
Tobacco	76.00	97.66	
Wheat	3.02	25.04	
Cotton	51.21	57.74	

One very interesting phase of the program during the past session has been the organization and development of a State organization of students in vocational agriculture known as the F. F. V's—the Future Farmers of Vir-

ginia. To date eighty-eight local chapters of this organization have been formed and the activities of these future farmers are rather similar.

Sixty-seven father-and-son banquets have been held.

Sixty school ground improvement projects are under way.

Sixty thrift banks are in operation with a total of \$52,000.00 invested in savings accounts and \$80,000.00 invested in farming by members.

Forty-eight exhibits displaying the work of the students in vocational agriculture have been staged at fairs of various kinds.

Quite a number of public debates and agricultural pageants have been held by local chapters of the future farmers' organization.

Equipment

Vocational agriculture is taught in a separate agricultural building at fifty-five points in Virginia. These buildings are built according to State plans and specifications. They are frame buildings as a rule, housing the classroom, laboratory, and shop. Eighteen combined home economics and agricultural buildings are used. In all other cases space is provided in the high school building.

Virginia does not spend the money for equipment that some other States do. The nature of the work demands equipment, but too much highly technical equipment is bought by some States. The State Board of Education in Virginia has held to the view that these departments should be equipped with practical materials and that costly apparatus (tractors, gas engines, etc.) should be worked with on the home farms but not furnished by the school authorities. The tendency is toward the purchase of pruning shears, de-horners, milk scales, spray tanks, and the like rather than test tubes, beakers, and balances. Farm machinery is not available in the schools but field trips are taken to farms where students study and operate implements and machines. It does not seem advisable to spend money for farm machinery when the machinery may be worked with in the community. The present equipment fund will not be adequate for essentials and local equipment must be used whenever possible.

Placement

Courses in vocational agriculture tend to keep boys on the farm. A study has been made of the occupational selections of former students and the results are very gratifying. Figure 16 shows the contrast in occupational selections of farm boys in rural high schools who did and did not take vocational agriculture. Follow-up records are not kept in many high schools and only nineteen schools could furnish data on nonvocational students.

The fear was expressed by some that the giving of vocational agricultural courses in high schools would tend to keep boys away from the State agricultural colleges. In Virginia, however, the agricultural high schools are acting as feeders for the agricultural college as is shown by the following bar graph:

The V. P. I. freshman student body when divided into groups according to the kind of high school which sent them. (Male students —1925-26.)

2.7%	8.4%	16.6%	72.2%
City	Town (nonvocational)	Rural	Agricultural High Schools

Influence of Vocational Agriculture in Directing High School Students
to the Farm

ALL FORMER VOCATIONAL STUDENTS IN 52 VIRGINIA SCHOOLS

43.79%

56.21%

ALL FORMER VOCATIONAL STUDENTS IN 52 VIRGINIA SCHOOLS
ALLIED OCCUPATIONS ADDED TO FARMING

57.67%

42.33%

ALL FORMER NONVOCATIONAL STUDENTS IN 19 VIRGINIA SCHOOLS

24.6%

75.4%

ALL FORMER NONVOCATIONAL STUDENTS IN 19 VIRGINIA SCHOOLS
ALLIED OCCUPATIONS ADDED TO FARMING

28.5%

71.5%

FARMING

NOT FARMING

Figure 16

Status of Vocational Agriculture in Virginia

A questionnaire was sent to influential citizens, farmers, bankers, merchants, etc., in each of the communities in which there was in operation a department of vocational agriculture. Care was exercised in sending these questionnaires so that they would be sent only to citizens who were not connected in any official way with the school system in their counties.

Two hundred and fifteen replies were received. These replies came from seventy-eight communities scattered throughout the sixty-five counties. It is interesting to note that 135 of the replies were from farmers, twenty-seven from bankers, twenty-six from merchants, and twenty-seven from people in other professions.

The information asked for and the answers secured follow:

To Any Banker, Farmer, Merchant, Editor, or Citizen:

Are you familiar with the work that is being done by the teacher of vocational agriculture in your community?

Do you believe the work he is doing is benefiting the farmers to the extent of:

	Replies	Yes	No
a. Increasing their bank accounts?	175	167	8
b. Causing better methods of farming?	210	209	1
c. Increasing quality of products?	199	198	1
d. Improving livestock?	199	196	3
e. Improving crops?	201	197	4
f. Bettering living conditions?	185	183	2
g. Increasing interest in education?	204	199	5
h. Causing farm boys to enter school?	185	178	7
i. Keeping boys in school longer?	192	186	6
j. Causing boys to take interest in farming?	206	201	5
k. Causing farmers to co-operate?	176	172	4
l. Causing farmers to do such things as prune, spray, use better seed, fertilizer, etc., cull chickens, and other improved practices?	204	202	2
Total.....	2,336	2,288	48

From a study of the above tabulation and the preceding paragraph, it will be noted that all of the 215 citizens replying did not answer every question on the blank. Answers to each question were tabulated and these results appear in the columns above. The total replies to all questions total 2,336, and of these 2,288, or 98 per cent, were answered in the affirmative.

From these replies, secured from representative citizens throughout the State, it appears that the departments of vocational agriculture are playing a rather important part in building up agriculture in rural communities, making them a better place in which to live, interesting the young men in staying in school and entering upon farming as a vocation.

A more detailed tabulation of the replies received from farmers, bankers, merchants, and men in other professions appears in the following table:

	Farmers		Bankers		Merchants		Citizens, Editors, etc.	
	Yes	No	Yes	No	Yes	No	Yes	No
Increasing their bank accounts.....	95%	5%	100%	.....	100%	.....	90%	10%
Causing better methods of farming.....	100%	.....	95%	5%	100%	.....	100%	.....
Increasing quality of products.....	100%	.....	95%	5%	100%	.....	100%	.....
Improving livestock.....	100%	.....	95%	5%	100%	.....	96%	4%
Improving crops.....	98%	2%	100%	.....	100%	.....	100%	.....
Bettering living conditions.....	100%	.....	92%	8%	100%	.....	96%	4%
Increasing interest in education.....	98%	2%	90%	10%	100%	.....	96%	4%
Causing farm boys to enter school.....	95%	5%	96%	4%	100%	.....	96%	4%
Keeping farm boys in school longer.....	98%	2%	90%	10%	100%	.....	95%	5%
Causing boys to take interest in farming.....	97%	3%	92%	8%	100%	.....	100%	.....
Causing farmers to co-operate.....	96%	4%	95%	5%	100%	.....	100%	.....
Causing farmers to prune, spray, use better seed, fertilizer, etc.....	99%	1%	97%	3%	100%	.....	100%	.....

Summary

1. Vocational agricultural education has shown a healthy growth in Virginia. The enrollment has increased from 229 to 4,433 in ten years. Twelve full time departments were added this year.
2. The growth of the work is now limited by lack of money and further expansion cannot be expected unless additional funds are provided.
3. The teachers are well prepared and capable. They are, with two exceptions, college graduates and have had practical farm experience.
4. The teaching methods used are above the average for the United States.
5. A large per cent of former students of vocational agriculture are farming or attending the State agricultural college.
6. The people of the State feel that the work is worth while.
7. The people of Virginia, the State Board for Vocational Education, the director and his supervisory staff, are to be congratulated upon the progress made.

Recommendations

1. Local communities should be required to pay one-third of the cost of instruction and equipment as at present.
2. The work should be expanded in order that every farm boy in the State may have an opportunity to fit himself for farming if he desires to do so.
3. In order to provide for reasonable expansion, the General Assembly should continue the present appropriation for equipment and match Federal funds dollar for dollar. The survey staff recommend that Smith-Hughes funds be matched by State funds in order that additional departments of vocational agriculture, home economics, and trades and industries may be put in where needed.

CHAPTER LXIX

TRADE AND INDUSTRIAL EDUCATION

The committee charged with the responsibility of surveying the field of trade and industrial education in Virginia has gathered information from the following sources:

1. Personal investigation of classes and schools where trade and industrial programs are in operation.
2. The Virginia State plan for vocational education.
3. The annual report of the State supervisor of trade and industrial education.
4. The annual reports of the Federal Board for Vocational Education.
5. The annual report of the State Superintendent of Public Instruction.
6. Official correspondence and statistics in the files of the State supervisor of trade and industrial education.
7. Courses of study offered in the secondary schools of Virginia.
8. Correspondence with individuals and organizations in Virginia having contact with the program of trade and industrial education.

The Need for Trade and Industrial Education in Virginia

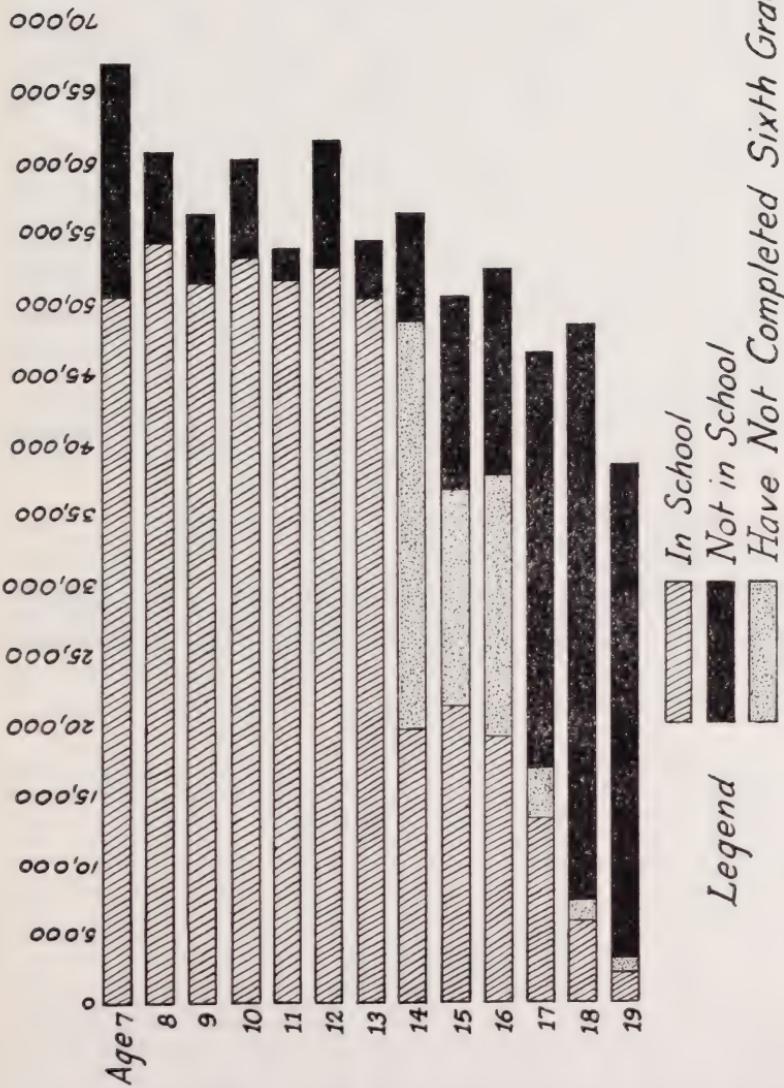
The future industrial and commercial welfare of Virginia demands the education and training of the people who are to do the State's work. An educational program which educates all of the children of all the people to the fullest extent of their possibilities is a valuable asset to the State and benefits alike the employer, the employee and the consuming public. It is only through establishing such a program that Virginia's resources can be fully developed and Virginia be made a great commercial and industrial State comparable to the potentialities which she possesses and capable of successfully competing with other States which are now her industrial and commercial superiors but which are less favorably endowed with natural resources.

To educate and train persons to fully capitalize their abilities and potentialities it is necessary to set up adequate programs in commercial, trade and industrial education on a level to reach the children in the public schools before entrance upon their chosen vocations, and also to set up similar programs to reach those children and adults who have already entered employment. Virginia is woefully lacking in trade and industrial programs to reach boys and girls prior to leaving school, and could do much more to educate those who have already entered employment. From a careful study of the courses of study offered in the city public schools it is evident that much emphasis is being placed upon the traditional college preparatory courses and but little emphasis upon preparing children to advantageously enter the various commercial, trade and industrial pursuits. An examination of the funds available for the State support of these forms of education shows that no funds are available for State support of commercial education except to employed persons who may be able to *persuade* their employers to allow them to attend school during working hours, and but a meagre sum is available for the State support of day trade and industrial courses. The amount available for evening trade and industrial courses appears to be adequate to meet the demands for the present. There are, however, no State funds available for the support of academic evening classes for workers who have been compelled through economic or social causes to leave the public schools and enter gainful occupations at an early age and who must depend upon evening schools to complete their general academic education.

General Academic Education

The result of not providing specific forms of vocational education to any adequate degree in the public schools is perhaps a large factor in the rapid elimination of children from school, as is shown in the following Figure 17:

Distribution of Children of Legal School Age in Virginia - 1926-1927



The total school population of Virginia in 1925 was 701,534. The school enrollment for the same year was but 542,515, which means that 159,019 children of legal school age and legally entitled to an education were not in school. Further, there were 57,589 children in school who were fourteen years of age or over but

who had not completed the sixth grade. It is quite evident that when a child has reached the age of fourteen and has not advanced beyond the sixth grade there are few if any chances that he will ever complete the high school, though, of course, there may be a few exceptions. Further to subject these children to the traditional college preparatory classes is a waste of public funds and effort, except 'o the extent that the child may gain some additional knowledge of the fundamentals. These fundamentals, however, may be acquired with greater ease and interest through the study of practical problems associated with vocational training. The same table shows that there were 40,635 pupils in the seventh grade; 23,980 in the eighth grade; 16,540 in the ninth grade; 12,452 in the tenth grade; 8,939 in the eleventh grade, and 1,286 in the twelfth grade. This heavy elimination is undoubtedly due to the endeavor of the State to give all children regardless of abilities, finances, attitudes, and interests, the same traditional college preparatory course when it is evident that but a very small proportion of the children ever enter college.

The philosophy of education that holds the sole objectives of education to be preparation for college and the setting up of educational opportunities along "cultural" lines for the favored few has rapidly disappeared in many States, but it appears that Virginia is still holding to this policy. The survey staff believe in preparation for college of those who will be benefited by a college education, but Virginia is not making adequate provisions for the large majority of her children who are leaving school and entering employment. The survey staff believes that one of the outstanding weaknesses of the Virginia public school is the failure to provide proper educational facilities for those children who are now entering employment at an early age. It appears that Virginia in her educational system is stressing the humanities while living in an age of science and invention. The survey staff feels that the State should not lessen the emphasis upon the humanities for those who are interested and able to profit by a study thereof, but rather that the State should set up programs stressing mechanics, commerce and science for the great majority of students who enter employment at an early age.

Status of Trade and Industrial Education in Virginia

Extent of trade and industrial education in Virginia.

One hundred and eighty-nine trade and industrial classes, enrolling 5,800 students, were in operation in Virginia during the fiscal year ending June 30, 1927. This is an increase of forty-eight classes and 1,965 students over the previous year. The kinds of classes with the enrollment in each are shown in the following:

Number of Persons Receiving Instruction in Trade and Industrial Education, 1926-27

Foremanship training classes	779
Day trade classes	1,198
Evening trade classes	2,777
Part time trade classes	724
Trade teacher training	124
 Total	 5,602

Administration

The Virginia State Board of Education, which is also the Virginia State Board for Vocational Education, is charged with the responsibility of administering all forms of vocational education. The State Superintendent of Public Instruction is the administrative officer of the board and acts as the director of vocational education and through him all contacts are made with the Federal Board for Vocational Education through which Federal moneys are appropriated to the State under the provisions of the Smith-Hughes act.

Trade and industrial education is one division of vocational education. The activities of this division are under the supervision of a State supervisor of trade and industrial education who has one field assistant and one clerical office assistant.

The administration of trade and industrial education in any given center in the State is under the direction of the local board of education, which designates some individual to have direct contact with the State supervisor. In the majority of places where instruction in trade and industrial education is given, the local superintendent of schools acts as this contact official. Local directors of vocational education are employed in only three centers in the State. In two of these three centers the directors are charged with additional duties, so that it is possible for them to give only a portion of their time to the promotion and supervision of vocational classes. Inasmuch as the local administration of vocational education in all but three centers is an extra duty of the local school superintendents, who admit that they are not qualified to supervise such work, what supervision is given locally is perfunctory and superficial and frequently amounts to nothing more than the making out of the necessary forms required by the State supervisor of trade and industrial education. In such cases, the local superintendent of schools relies almost entirely upon the individual teachers to keep the classes in operation. The State supervisor is able to visit each center only once or twice during the year to render such assistance as may be given in the short period of time at his command.

The survey staff is particularly impressed with the extensiveness and thoroughness of the trade and industrial program in operation in the State, considering the small staff of supervisors and the small amount of money available for State support of the work.

The State Plan for Trade and Industrial Education

The State Board for Vocational Education has set up a most excellent and fully adequate State plan for trade and industrial education. The objectives of this plan cannot be realized, however, until the State and communities provide the necessary finances and until the communities have awakened to the urgent need for such training and assist in the organization and promotion of classes. The State plan as set up provides for the following types of classes which would meet the needs of trade and industrial workers:

1. Evening Vocational Classes for Employed Workers.

The instruction given in the evening classes for employed workers is supplementary to the daily employment. This consists of instruction in such drawing, mathematics and science as may be needed by the worker to make him more proficient in his work or to prepare him for promotion or advancement in his vocation. These classes are open only to workers in trade and industrial pursuits who are sixteen years of age or over. The burden of providing supplies and equipment and a portion of the teacher's salary is placed upon the local community. The teachers in vocational evening schools are selected from the trades or industries in which instruction is being given, and are selected on a basis of their personality, knowledge of the trade or industrial practice, and their potential qualifications as a teacher.

2. Day Unit Trade Preparatory Classes.

Day unit trade preparatory classes may be organized in any community when there is a sufficient demand for the graduates of such an industrial class. These trade classes serve as a substitute for the apprenticeship system which is now practically extinct and enables the worker to advantageously enter employment. The minimum age for attendance in day trade classes is fourteen years. The length of the course may be two, three or four years of nine months each. The instruction is divided as follows: Fifty per cent of

the pupil's time must be devoted to actual shop practice on a productive commercial basis; 25 to 20 per cent of the time to the related drawing, mathematics and science of the trade or industrial pursuit; and 30 to 25 per cent may be devoted to any other academic subjects, such as English, art, literature or unrelated science. The teachers of these classes are recruited from the trade or industrial pursuit in which instruction is to be given and are selected on the same basis as an evening school instructor. After being employed as teachers they are required to pursue professional teacher training courses as outlined later in this chapter.

3. Part Time Trade Extension Classes.

The State plan for trade and industrial education provides that classes for employed workers may be organized during otherwise working hours. Under this plan of organization employers relieve their juvenile workers for a minimum of 144 hours per calendar year to attend classes, the instruction in which is intended to make the employee more proficient on the job or to prepare him for promotion in the industry.

4. Part Time General Continuation Classes.

The State plan for trade and industrial education provides that classes for employed workers may be organized during working hours, the instruction in which may be of a general nature. Any subject which will increase the civic or vocational intelligence of the workers may be taught. While the establishment of these classes is voluntary on the part of the employers of Virginia, twenty-seven States in the Union have made the establishment of such classes compulsory for juvenile workers.

5. Under the Provisions of the State Plan for Trade and Industrial Education, General Industrial Schools May be Established.

This type of school is applicable to cities and other communities of less than 2,500 population. In these schools certain trades having a common fund of trade skill and information may be combined and taught by one or more teachers. As an example, carpentry, cabinet making, pattern making and general mill work may be combined and taught as a unit, each student specializing in one of the trades.

6. Foremanship Training.

About five years ago the State Board for Vocational Education, at the request of a few industries, employed an assistant State supervisor of trade and industrial education, whose chief responsibilities were to conduct courses for the improvement of foremanship in industries throughout the State. This was but a temporary arrangement, but the demand for this service has increased until now it is difficult to meet it with the present staff. The present assistant supervisor is scheduled over a year in advance.

The program of foremanship training is not a series of lectures, but rather a series of conferences, each of which is thirty hours in length, usually conducted on company time three hours per day and distributed over a period of two weeks. The topics discussed with the foremen are such as job analysis, foreman's responsibility, means of cooperation, job interest and pride, labor turnover, accident prevention, elimination of waste, increasing production, decreasing costs, routing and inspection of materials in process, giving orders and directions, instructing employees, and such other problems as would tend to increase the efficiency of the foremen.

Inasmuch as this work is supported by State and Federal funds, no charge is made to the local industries desiring the service. The service is open to any industry or group of industries desiring the same.

At the conclusion of each conference a mimeographed report is made of the proceedings. Copies of this report are furnished each foreman and to

the management. The local industries pay for the clerical assistance and the expense incurred in getting out the report.

The work in foremanship training, which Virginia is doing, has gained national recognition and requests for the literature and reports relative to the same have been received from many States in the Union and from foreign countries. The 1926 report of the United States Chamber of Commerce places Virginia eighth in the list of States providing foremanship service to the industries.

As a result of this type of industrial education, one group of industries has employed a man on full time to continue the work; another group of industries is about to ask for a man to give full time to their industries; several foremen's clubs have been organized for the promotion of plant efficiency, and several industrial managers have reorganized their foremen's meetings on the same basis employed by the State foreman trainer. The survey staff has examined numerous letters on file in the office of the State supervisor of trade and industrial education, which have come from the managers of plants in which foremanship classes have been conducted, and all state that specific benefits have accrued from the work.

The survey staff feels that it should especially commend the excellency of the foremanship trainer program as conducted by the division of trade and industrial education. The results are outstanding when compared with those of other States of the Union, notwithstanding the meager funds available and the small force employed in the work.

7. Teacher Training.

Teacher training in Virginia is conducted in five ways.

a. Resident teacher training for colored teachers at the Virginia Normal and Industrial Institute.

b. Extension teacher training courses offered through the Virginia Polytechnic Institute. These courses are offered in those centers where there are five or more industrial teachers and are taught by competent persons selected by the State supervisor of trade and industrial education and approved by the college.

c. Itinerant teacher training conducted by the supervisor or assistant supervisor of trade and industrial education. This type of teacher training is applicable to centers when there are not a sufficient number of teachers to warrant establishing special teacher training classes.

d. Whenever there is a sufficient demand, summer courses are offered at the Virginia Polytechnic Institute for employed teachers and prospective teachers.

e. Whenever there is an extensive program of industrial education contemplated in any community, men who have potential teaching ability and qualifications are selected from the cooperating industries and are giving intensive teacher training instruction for a period of from two to three weeks, six hours per day. One such program was conducted in the coal mining industry in 1927, and another will have been completed by the time this report goes to press.

An adequate supply of well-trained industrial teachers is very essential to a program in trade and industrial education. The large majority of trade and industrial teachers in Virginia is selected from among the competent workmen in the trades and industries. Many of these men have had no previous teaching experience and, therefore, need to be given instruction in how to teach. The State and Federal funds available for teacher training in Virginia fall far short of the amount necessary to carry on an adequate program. It, therefore, has been necessary for the State supervisor and his assistant not only to give much of their time to teacher training, but to

solicit assistance from sources outside of the department. In the past they have been successful in gaining the cooperation of the Virginia Polytechnic Institute, the United States Bureau of Mines, the Federal Board for Vocational Education, a few local school boards, the Virginia Normal and Industrial Institute and a few leading men in industries of the State. However, there is no assurance that assistance will be forthcoming in the future from these sources.

The course of study in teacher training for industrial teachers who are selected from the trades or industries consists of thirty-six credit hours (twelve session hours), as measured in terms of credit at the Virginia Polytechnic Institute. Teachers may secure these credits through attendance in summer schools, extension courses, or by attending the regular sessions of an accredited college. The subjects in the course of study are as follows:

Course of Study

Trade analysis	3	credit hours	(1	session hr.)
Methods of shop instruction, including practice teaching and observation.....	3	"	"	(1 " "
Methods of conducting conferences, including practice in same	3	"	"	(1 " "
Vocational education	3	"	"	(1 " "
Administration of vocational education.....	3	"	"	(1 " "
Vocational psychology	3	"	"	(1 " "
Human factor in industry	2	"	"	(2/3 " "
Labor problems	2	"	"	(2/3 " "
Employment management	2	"	"	(2/3 " "
Sociology	3	"	"	(1 " "
Economics applied to industry.....	3	"	"	(1 " "
English	3	"	"	(1 " "
Industrial history	3	"	"	(1 " "
Total	36 credit hours. (12 session hrs.)			

An average of at least three credit hours (one session hour) must be taken each year. Credit for college work at the Virginia Polytechnic Institute is given in terms of credit hours. Three credit hours are equivalent to one session hour as recorded by other colleges. A class meeting thirty-six periods of sixty minutes' length, during a regular college quarter, or thirty periods of sixty minutes during a summer term gives three credit hours.

Finances Available for Trade and Industrial Education

All trade and industrial classes conducted by the public schools of Virginia are supported by funds derived from three sources—namely, the Federal government, the State government, and the local school boards. State and Federal funds may be used only for partial payment of the salaries of teachers, while local funds must pay part of the salary of the teachers and provide the necessary supplies, equipment and housing facilities. The Virginia State plan for vocational education provides that for every dollar expended for teachers' salaries by the local communities the State and Federal government will each appropriate one dollar, as far as funds will permit. However, the State does not appropriate a fund sufficient to equal the subsidy accruing from the Federal government, so in order to secure the full benefit of the Federal moneys the State has found it necessary to require the local communities to appropriate, in addition to the one-third as provided in the State plan, an amount equal to the difference between what the State appropriates and the amount coming from the Federal government. In other words, the local communities interested in setting up trade and industrial classes are required to provide part of the money which the State agreed to appropriate when it officially accepted the provisions of the Smith-Hughes act. The

survey staff feels that this is an oversight on the part of the Virginia legislature. When the provisions of the Smith-Hughes act were accepted by the State, the Virginia legislature made an appropriation to fully match the appropriation of the Federal government. Since that time, however, the Federal subsidies have automatically increased as trade and industrial education programs increased, but the last three sessions of the Virginia legislature have failed to increase Virginia's share proportionally. This has caused the State to place the extra burden upon the local communities. The survey staff understands that the same conditions prevail in the programs of agricultural and home economics vocational education.

The Virginia State plan for trade and industrial education, which is written in accordance with the provisions of the Smith-Hughes act, specifies the manner in which Federal moneys must be apportioned between the several types of classes heretofore mentioned. Forty-six and two-thirds per cent of the money derived from the Federal government, if spent, must be expended for the payment of salaries of teachers of day unit, evening or general industrial classes; thirty-three and one-third per cent must be used for the payment of salaries of teachers of part time trade extension or part time general continuation classes; twenty per cent may be used for the salaries of teachers of home economics education.

The amounts available for all types of work for the fiscal year 1927-28 are as follows: Federal, \$30,027.38; State, \$20,008.32. If the State is to receive the full benefit of the above Federal amount the local communities will be required to provide \$10,019.06, or the difference between what the Federal government appropriates and what the State appropriates.

In addition to the above amounts the Federal and State governments each appropriate \$7,311.74 for supervision, foremanship training and teacher training and to provide for clerical assistance, supplies, travel and communication. This fund is divided as follows:

To supervision (including traveling expenses, salaries of supervisor and assistant supervisor, clerical assistance, communication and supplies): Federal, \$3,290.28; State, \$3,890.28.

To teacher training and foremanship training: Federal, \$4,021.46; State, \$3,421.46.

In order to secure the full amount of the Federal appropriation the local communities are, therefore, required to appropriate an additional \$600.00.

Below is a summary showing the sources and amounts of money provided for trade and industrial education in the State for the fiscal year ending June 30, 1927, and the types of classes to which the funds were distributed:

Day unit	\$12,983.18	\$10,438.05	\$25,620.46	\$49,041.69
Evening	4,396.79	6,544.83	4,247.22	15,188.84
Part time trade extension.....	3,787.50	812.50	2,975.00	7,575.00
Part time general continuation....	3,709.20	1,484.53	2,453.69	7,647.42
Teacher training	2,350.00	750.00	1,600.00	4,700.00
	<hr/>	<hr/>	<hr/>	<hr/>
	\$27,226.67	\$20,029.91	\$36,896.37	\$84,152.95

Salaries for Administration, Supervision and Teaching

The salaries paid for administration and supervision of trade and industrial education are as follows:

State director of vocational education	\$ 600.00
State supervisor of trade and industrial education.....	3,750.00
Assistant supervisor of trade and industrial education.....	3,000.00

The salaries for local directors of vocational education range from \$3,000.00 to \$3,600.00 with additional compensation in some cases for the administration of evening schools. As stated in another section of this survey, the local directors of vocational education have the administration and supervision of other types of school work in addition to those of director of vocational education. The salaries indicated above are total amounts received from all sources.

The salaries of teachers of trade and industrial day unit classes range from a minimum of \$1,060.00 to a maximum of \$2,300.00 per year with an average of \$1,837.00 per year for the State. The salaries for evening school teachers range from a minimum of \$2.50 per night to a maximum of \$4.00 with an average of approximately \$3.00.

The Attitude of Agencies Outside of the School System Toward Trade and Industrial Education

The survey staff has examined letters and resolutions received from individuals and organizations which have had contact with the program of trade and industrial education as conducted in Virginia, and feels that there is a sentiment decidedly in favor of an increase in the program. Many letters are in the files of the State supervisor of trade and industrial education expressing the appreciation of employers and stating the benefits they have received from the work. Resolutions have been passed by the Virginia Manufacturers' Association and the Virginia Federation of Labor which express the attitude of these organizations toward the work. These resolutions are as follows:

Virginia Manufacturers' Association

Whereas, certain members of the Virginia Manufacturers' Association have utilized the advantages offered by the vocation educational department of the State Board of Education, and

Whereas, many of our industries may be helped by this department,

Be it resolved, That we express our interest in the work of this department and request our board of directors to make a thorough study of the operations and functions of the department of vocational education for the information and guidance of the individual members of this association in their contacts with this department.

Virginia Federation of Labor

Whereas, the Virginia Federation of Labor and the American Federation of Labor have always endorsed the public school system and its incipiency the principle of vocational education as represented by the State department of vocational education, and

Whereas, labor is most interested as we lals the most affected party in education; now, therefore, be it

Resolved, by the Virginia Federation of Labor, in the thirty-second annual convention assembled, That we do hereby recommend that a standing committee on education, known as the committee on education, be appointed by the Virginia Federation of Labor to cooperate with the State Department of Education on all matters affecting education in general, with special reference to the divisions of vocational education, viz.: Trade and industrial, agriculture and home economics divisions, and be it further

Resolved, That we recommend that similar committees be appointed by the various central bodies, shop federations and trades councils to cooperate with the local school authorities in all matters pertaining to education.

Value of Trade and Industrial Education

The following are extracts taken from a report to the survey committee coming from the Virginia Coal Operators' Association which made an impartial survey, based upon facts and personal opinions, relative to the value of trade and industrial education as it is functioning in the Virginia coal fields. This association has a rather elaborate program in foremanship training and evening classes in mine safety and accident prevention, and, therefore, is in a

position to know the efficacy of the work. The companies represented in this survey report employ 14,000 workers or 57.7 per cent of the men engaged in the coal producing industry in Virginia, and produced in 1926, 56.3 per cent of the total tonnage of coal produced in Virginia.

1. " * * * It is too early as yet correctly to evaluate this work, but the employers in the coal group are generally of the opinion that this class of work if continued will finally result to a considerable extent in reducing the number, frequency and severity of accidents to employees engaged in the coal industry * * *.

2. "Since completing classes in mine safety and accident prevention at all of our plants we have noted a marked reduction of all classes of accidents. We have noted further, that the men who have received the benefit of this training seem to give more thought to, not only safety practices on their part, but safety practices on the part of their fellow workmen, and I, therefore, attribute the tremendous reduction in lost time accidents to the training our men have received in these accident prevention classes. I believe that these classes have done more toward the reduction of accidents in the Virginia coal mines than anything that has ever been done before. In my opinion the work should be continued even more vigorously than in the past.

3. " * * * Another educational activity which has occupied a prominent place in the coal industry is the training of mine employees to render first aid to the injured. In this work the United States Bureau of Mines, cooperating with the coal producing companies, has taken the lead, and more than five thousand mine employees have been trained to administer first aid to the injured. Hundreds of these men are competent to handle and care for those who are injured, whether in industrial pursuits, on the road, or at home. This training, as well as the evening classes in mine safety and accident prevention, is given to white and colored employees alike. * * *

4. " * * * Additional knowledge acquired by these men in these conferences will no doubt be helpful in connection with their work as foremen. Much depends, however, upon what use the men make of the knowledge acquired, and also as to what the employer does in a follow-up way in recognizing the value of such conferences with a view of making use of the additional knowledge acquired or supposed to have been acquired by the employee. In other words, the employer should bear in mind that certain employees have been given the advantage of foreman training conferences; the idea being that they would be better qualified to do work as foremen. Such action would no doubt encourage other men to take the same training. * * *

5. " * * * Since the classes in mine safety and accident prevention started, we have had a decided improvement in our accident records. It is, of course, difficult to say to what extent the 'Safety Trained' men have contributed to this improvement, but we are satisfied that the greater number of 'Safety Trained' men, we or any other coal mining operation might have employed, would certainly tend to reduce the number of accidents. Therefore, we are thoroughly sold on the idea of education in mine safety and accident prevention such as is offered in the classes that have been conducted * * *.

6. "We found the 'foremanship training class' that Mr. S— attended as a representative of our mines, really worth while * * * I consider it a fine idea.

7. " * * * We had one 'Mine Safety and Accident Prevention Class' conducted by Mr. S— at our mines. A few of the men stayed with it to the end, others dropped in and out; it was a disappointment to some extent.

8. " * * * I believe that it may be advisable to have our mining laws reenacted so as to have a clause inserted requiring every mine

worker to attend the accident prevention classes for one term, where such instruction is offered by the operator. I do not believe that the laboring people should at this time be required to equip themselves independent of their employer for service, but if the employer goes to the trouble and expense of helping the men, then he should have some reasonable means of requiring attendance by all men who have not had such instruction. * * *

9. " * * * Through these conferences the necessity of care and consideration for labor is impressed upon the entirety of the organization. I think that work of this character has a tendency to correct and to explain grievances, real or imaginary, to the workmen, and thereby lessen industrial disputes and unrest, and reduce labor turn over on the job. When the proper treatment of labor is made the objective of the entirety of the supervising organization, the inevitable result is the recognition of these kindnesses on the part of labor and a creation of the spirit of loyalty on their part to their organization and to their industry, unobtainable in any other manner. * * *

10. " * * * The analyzing of different jobs to be performed naturally awakens a keenness on the part of the foremen and workmen to perform the task with the least effort, the least time in the best and most permanent manner. This creates a tendency on the part of men to exercise their ingenuity and create a thinking organization which will take advantage of the opportunity rather than to do the work in the way they have seen it done heretofore. This necessarily makes the foremen more alert and desirous of issuing his orders in a full but concise manner in order that he may not be embarrassed in the presence of his workmen. * * *

11. " * * * In my opinion our foreman training conference has given to our foremen:

(1) A closer and more intimate feeling toward the management.

(2) A greater realization of the importance and responsibility of their jobs, creating a desire on their part to carry these responsibilities.

(3) A clearer understanding of the different work jobs, and a better method of getting them done, and

(4) A very material increase in the use of their mental powers on the job, and in the handling of men.

12. " * * * These foremen conferences have:

(1) Resulted in giving to our workers a better feeling toward our foremen and management.

(2) A clearer understanding of how to do the different work jobs, and

(3) A desire to become more proficient in their work, and thus make them available for foremen."

The above letters and resolutions show that many of the employers and a large proportion of the employees of the State are interested in trade and industrial education and would like to have the programs expanded.

Attitude of Some School Officials Toward Trade and Industrial Education

Many of the district school superintendents seem to be quite in favor of establishing programs for trade and industrial education in those centers where there is a need for the same, but complain that they do not have sufficient finances available to adequately support the elementary schools and, therefore, are prohibited from organizing additional classes, however essential they may deem such classes to be. A few school superintendents in places where there are adequate funds available for the support of any desirable form of education, are willing to establish trade and industrial courses pro-

vided the demand for such courses comes from those who are to be benefited by the same.

Activities in 1926-27 of the State Supervisor and Assistant State Supervisor of Trade and Industrial Education

SUPERVISOR

Miles traveled	Total traveling expense	Cost per day in field.	Days in office	Days in field	Meetings Attended				Promotional meetings	Inspectional meetings	Instructional meetings	Schoolrooms visited
					Of teachers	Of school boards	General	School buildings visited				
15,040.2	1,126.65	6.42	150.5	176.5	76	4	168	76	168	111	76	111

ASSISTANT SUPERVISOR

12,728.1	1,400.63	5.26	99	266	29	0	3	10	291	29	337	29
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The State of Virginia does not make adequate provisions for vocational education along trade and industrial lines for the boys who are living in the smaller cities and towns of the State. Several attempts have been made by the State and local communities in the past to set up trade and industrial classes for this class of young men, but in most cases the work has been discontinued due to the lack of a sufficient number of students or to the high per capita costs.

Judging from the number of letters of application for trade and industrial education in the files of the State supervisor of trade and industrial education, coming from young men living in small cities and towns, the committee believes that there is a sufficient number of young persons in these places who are anxious to learn some specific trade or vocation to justify Virginia in establishing a State trade school. Such a school should preferably be located in an industrial community and should prepare boys advantageously to enter the building and machine trade and the textile, paper, and furniture manufacturing industries of the State.

General Supervisory Problems

The vocational work in trade and industrial education is located primarily on the eastern and extreme southwestern sections of the State, with a few classes in the central section and one in the northern section. This distribution of classes occasions considerable traveling, and although the State supervisor spent 176.5 days in the field in 1926-27, it was impossible for him to give all the centers in which classes are held a sufficient amount of time and assistance. It was, therefore, necessary for him to depend upon the local supervisors to see that the programs are carried on in accordance with the provisions of the State plan for vocational education.

It ought to be possible for some one officially connected with the State department to visit each teacher at least twice or three times each year, especially the evening school teachers. It must be remembered that the

evening school teachers are recruited from the trades and industries, and they are largely without teaching experience. These men and women need considerable assistance which can be given only by the State supervisor or by the local director, in case there is such an individual. The work in most places, however, is not sufficiently extensive to warrant the employment of a local director, so the bulk of supervision and teacher training falls upon the State supervisor and his one assistant.

It is especially difficult properly to supervise evening classes. These classes usually meet on Monday, Wednesday and Friday nights, or, on Tuesday and Thursday nights, so it is practically impossible for the State supervisor to visit more than five evening classes per week. For example, there are thirty-two evening classes in coal mining in Southwest Virginia. To visit each of these classes and spend an hour or so with each instructor would require at least six weeks of constant visitation at an approximate cost of \$270.00 for traveling expenses alone. (Forty-two days at an average cost of \$6.42 per day.) If the salary of the State supervisor be added to this, the cost of supervision would be approximately \$700.00, thus making the overhead cost of supervision about equal to the total cost of instruction. This does not include the overhead costs of keeping the office of the State supervisor in operation.

These facts are cited to show the need for either the appointment of local directors who could take over much of the work that is now being undertaken from the State Department of Education, or an addition to the State supervisory staff.

Summary of Progress of Industrial Education, 1926-27

Total number of classes in trade and industrial education:

1926-27	189
1925-26	141
Increase	48 classes

Total number of students taking trade and industrial subjects:

1926-27	5,800
1925-26	3,835
Increase	1,965 students

Day Unit Classes

	1925-26	1926-27	
Total number of classes	27	33—Increase	6
Total enrollment	968	1,198—Increase	230
Average per capita cost for instruction....	\$41.38	\$40.93—Decrease	.45

Evening Classes

	1925-26	1926-27	
Total number of classes	53	107—Increase	54
Total enrollment	1,073	2,329—Increase	1,256
Average per capita cost for instruction....	\$9.47	\$5.62—Decrease	\$3.85

Foremanship Training

	1925-26	1926-27	
Total number of classes.....	15	37—Increase	22
Total enrollment	366	779—Increase	413
Average per capita cost for instruction....	\$13.69	\$11.42—Decrease	\$2.27

Part Time General Continuation

	1925-26	1926-27
Total number of classes	9	8—Decrease 1
Total enrollment	248	446—Increase 198
Average per capita cost for instruction....	\$29.48	\$27.25—Decrease \$2.23

Part Time Trade Extension

	1925-26	1926-27
Total number of classes	5	4—Decrease 1
Total enrollment	285	278—Decrease 7
Average per capita cost for instruction....	\$29.48	\$27.52—Decrease \$2.23

CHAPTER LXX

HOME ECONOMICS IN THE PUBLIC SCHOOLS

Home economics is not taught as a special subject in the elementary grades (1-7) except in a few schools, most of which are in the larger cities and towns. A questionnaire sent out to home economics teachers showed fourteen school systems were offering home economics below the eighth grade. In other schools, if taught at all, the subject is taught incidentally. Most of the rural schools are organized on the 7-4 plan and do not offer home economics in grades 1 to 7. In schools which have the junior high school organization, home economics is usually offered.

There are 190 high schools in the State in which home economics is taught. These schools were studied in two groups, those which receive State or federal aid, and are known as vocational schools, and those which are supported by local funds, often spoken of as nonvocational schools. The vocational schools are under State supervision, the nonvocational schools are not.

Table 68 shows the growth of vocational home economics over a period of ten years, 1917-1927.

Is Home Economics Elective or Requirer?

In the junior high schools, and in the grades corresponding to the junior high schools, fourteen schools reported. Fifty per cent showed home economics elective and the others reported it as required. The range in schools offering the subject as an elective was 7 per cent to 100 per cent with a median of 35 per cent.

In the high schools, fifty-one of the vocational schools offer home economics as an elective with a range of 8 to 100 per cent and a median of 68 per cent. Eight of these schools reported the subject as required. In the nonvocational schools, thirty report home economics as an elective subject with a range of 3 to 100 per cent and a median of 19 per cent. Three of these schools require home economics.

This study shows home economics to be a more popular elective in the vocational schools than in the nonvocational schools. Is it because of the vocational factor? Probably not. The vocational schools are under State supervision of a home economics supervisor and the teachers are called into conference at least once a year to bring in their problems. Definite standards are set up for the group. Effort has been made to get a good carry-over into the homes of pupils by home visits and community activities. The State supervisor makes constant contacts with these schools through correspondence, sending out suggestions and materials to them and by personal visits to the schools. The fact that the large majority of these schools are located in the towns and rural sections rather than in the larger cities is a factor, influencing greater election of home economics.

The following conclusions can be drawn from the questionnaire sent out to school principals and to city, county, and district superintendents:

1. A much higher per cent of the students elect home economics in the rural sections than in the larger towns and cities.

Range for rural sections, 12 to 100 per cent, median 50 per cent;

Range for larger cities and towns, 8 per cent to 45 per cent; median 18 per cent, the larger cities showing about 8 per cent.

2. As compared to other electives, home economics is reported as *popular* by forty-four principals and superintendents, *more popular* by forty-four, and *less popular* by eight.

3. Great variation occurs in answers to the question: "Is the fact that some colleges allow little or no entrance credit for home economics a factor influencing the election of the subject?" Thirty-three per cent of the superintendents and principals from rural sections and eighty-eight per cent of those from the larger cities and towns answered, "Yes."

4. Eighty per cent of the superintendents and principals said home economics should be elective in the high schools.

5. Seventy-seven per cent of the superintendents and principals say that they think home economics is a cultural subject.

Amount of Time and Credit Given to Home Economics

For one unit of credit, the State requires not less than five laboratory periods of eighty minutes each, or five single periods of sixty minutes, or the equivalent of this amount of time, subject to the approval of the State Board.

Most of the high schools allow eighty minute periods. The schools which are on the sixty minute plan are having some difficulty in getting adjusted to the shorter period. A few of the schools offer a half unit in a year. The State does not recognize less than one unit but this can be made in two years.

How is Work in Home Economics Supported?

The following funds are available for this work:

State appropriation	\$15,000.00
Agriculture home economics maintenance	20,000.00
Smith-Hughes fund. (Twenty per cent trade and industrial fund)	
Federal appropriation	7,506.84
State fund	5,002.08
Total	\$47,508.92

The State fund should match the Federal fund, dollar for dollar. The State fund is \$2,504.76 short.

How Does the Appropriation for Home Economics Compare with that for Agriculture and for Trades and Industries

	Appropriation	Enrollment	Appropriation per Capita
Agriculture	\$233,449.48	4,718	\$49.48
Trades and industries ...	73,063.53	5,152	14.18
Home economics	47,508.92	4,760	9.98

Salaries of home economics teachers are fixed and paid by the local school boards. In the case of the vocational schools, the local board is reimbursed, up to the amount of \$750.00, for one-half of the home economics teacher's salary, depending upon the experience and preparation of the teacher and the proportion of her time which is given to home economics. The salaries of teachers holding different kinds of certificates are shown below:

VOCATIONAL SCHOOLS	Range	Median
Special Certificate in Home Economics	\$100.00-\$222.00	\$100.00
Normal Professional Certificate	100.00- 150.00	112.00
Collegiate Professional Certificate	100.00- 166.00	122.00

NONVOCATIONAL SCHOOLS

Special Certificate in Home Economics	\$ 75.00-\$204.00	\$110.00
Normal Professional Certificate	70.00- 188.00	115.00
Collegiate Professional Certificate	90.00- 222.00	133.00
(Salaries given are for white teachers only.)		

The question: "How is the cost of carrying on laboratory work met?" was answered by a hundred schools:

Fees paid by school board	68
Supplies brought from home	35
Money raised by department	29
Fees paid by pupils	16
Help from local clubs	5

It can be seen that some of the schools used two or more of these plans. The method of having the fees paid by the school board is the one most used and the most satisfactory.

Preparation of Home Economics Teachers

Most of the home economics teachers in the State are trained at the four State Teachers Colleges and at the College of William and Mary. There are two certificates which a home economics teacher may secure in order to qualify. The Collegiate Professional is the highest of these and is given on completing the home economics course for a bachelor of science degree. The special certificate is granted on the completion of thirty session hours of college work as specified by the State Board of Education.

It is gratifying to see that the number of Collegiate Professional Certificates is increasing. There is a proportional decrease in the number of special certificates.

Table 69 shows the number of home economics graduates for a period of ten years.

These colleges are now prepared to turn out a sufficient number of B. S. graduates to fill all vacancies and to meet demands for new departments in the schools.

The Course of Study

This is given below for the State aided schools. Many of the schools not under State supervision use this as a guide.

Course for State aided schools for departments of home economics:

First year

English	5-40 minute periods a week,	1 unit
Mathematics or history	5-40 minute periods a week,	1 unit
General science	5-7-40 minute periods a week,	1 unit
Home economics	5-80 minute periods a week,	1 unit
4 units		

Foods and cookery (2 periods)
Textiles and clothing (2 periods)
Applied design (1 period)

Second year

English	5-40 minute periods a week,	1 unit
Mathematics or history	5-40 minute periods a week,	1 unit
Human biology, chemistry or physics.....	5-7-40 minute periods a week,	1 unit
Home economics	5-80 minute periods a week,	1 unit
4 units		

Home management (4 periods)
Home nursing, sanitation, child care, etc. (1 period)

A topical outline of the home economics course will be found in the Science Bulletin put out by the State Board of Education.

Over half of the schools which are under State supervision have the cottage plan equipment. This was introduced in Virginia by Mrs. Ora Hart Avery, present State supervisor of home economics. The equipment is like that found in the home. The class is divided into groups which carry on the various activities of the cottage. One day in the week is given over to planning the work for the entire week. There is a good reference library so that students can look up such subject matter as is related to their work at the time when it is needed. Guide sheets are being worked out for use in this work. Conferences are held in each group when either students or teachers feel the need of them. This plan offers a greater opportunity for a better carry-over in home economics because the subject is taught under more home like conditions.

All clothing construction work and cooking are on the laboratory or cottage plan; that is, a double period is used and practical work is undertaken. In

teaching home management, child care, and interior decoration, the double period is often split into two single periods of forty minutes each.

Does Home Economics Touch the Home?

This question was studied from several angles. A questionnaire was sent to parents; community activities of home economics clubs were studied; home projects and home practices were reported by teachers; and nearly a thousand girls were asked to report on the home jobs which they undertake.

The questionnaire was sent to eight hundred parents, one-third to the larger cities, one-third to small towns, and one-third to rural sections. The answers are tabulated for these three groups:

	Rural		Small Towns and Small Cities		Larger Cities		Total for All Schools	
	Yes	No	Yes	No	Yes	No	Yes	No
1. Is home economics taught in the high school?.....	66	1	79	.....	66	12	211	13
2. Do you now have or have you had any girls taking this work?.....	62	3	77	1	58	30	197	34
3. Are the girls interested in the work?.....	60	1	78	1	61	32	199	34
4. If so, do they show interest in the following ways?								
a. By doing better work at home.....	59	2	73	5	57	4	189	11
b. Wanting to try out at home the things they do and talk about at school.....	61	.....	70	6	59	3	190	9
c. Showing a better appreciation of work in the home.....	50	1	71	5	55	3	176	9
5. Is the girl's interest in this work due partly to encouragement at home?.....	54	1	70	6	53	3	177	10
b. If girls are not interested in this work, is it due to:								
a. Lack of encouragement at home.....	10	10	33	43	9	20	52	73
b. Lack of encouragement at school.....	4	12	1	45	12	18	17	75
c. Personality of home economics teacher.....	8	18	1	45	10	18	19	77
d. Too much time required as compared to other subjects.....	5	14	1	45	13	15	19	74
e. Subject not interesting.....	4	15	2	44	14	15	20	74
f. Having taken subject before reaching high school, feel they have had enough home economics.....	2	16	3	43	12	19	17	78
g. Question as to whether it will be accepted for college entrance credit.....	6	8	6	40	13	13	25	61

Methods of Presenting the Work and Organization of Subject

In all laboratory work observed, a brief discussion of the problem preceded the practical work. In teaching cooking, teachers in the sixty minute period seemed to be having difficulty in adjusting their work to the shorter period. With a sixty minute period, some of the teachers are using one period a week for discussing and planning work for the remainder of the week. Work on the cottage plan is usually done in this way. No foods and nutrition or clothing and textiles courses are taught without laboratory work.

Methods of Presenting the Work and Organization of Subject

METHODS OF PRESENTING WORK	Number Answering in Affirmative					
	Foods & Nutrition	Textiles and Clothing	Hygiene & Home Nursing	Home Management	Child Care	Family Relations
1. Discussion.....	48	35	33	44	43	39
2. Laboratory and Discussion.....	57	59	40	25	19	15
3. Laboratory.....	34	29	14	18	8	.....
4. Cottage Plan.....	24	26	20	26	21	21
Is work organized on single lesson basis?.....	6	9	21	16	28	14
Is work organized on project basis where a group of lessons center on solving a problem?.....	76	69	39	46	45	28
In planning your lesson do you make:						
1. A mental plan.....	46	45	32	29	28	21
2. A written lesson plan.....	16	22	19	17	16	12
3. An outline of lesson.....	42	37	31	34	36	24
4. A lesson guide sheet.....	26	16	14	14	12	10
Are lesson guides, or job analyses, made:						
1. By the teacher.....	30	21	30	25	26	21
2. By pupils and teacher.....	47	45	22	27	23	16
Are lesson guides made for:						
1. A single day's lesson.....	7	6	14	10	9	11
2. A group of lessons forming a unit.....	65	64	41	43	42	30
Does each day's lesson contribute to solving a problem?..	71	47	44	40	39	34
Is the pupil conscious of the problem?.....	56	45	34	31	32	25
In planning your lesson check in each column which of the following you have in mind:						
1. What pupils will do?.....	64	60	41	25	37	26
2. What information they will learn?.....	76	62	52	43	42	40
3. What skills will be strengthened?.....	70	73	47	42	39	26
4. What attitude and ideals will be developed?.....	62	56	48	47	45	38
5. What references will be used?.....	58	47	42	41	37	32

Suggestions for Improving the Work

Answers from Rural Sections.

"Teach more about every day things"

"Give four years of home economics work in the high school."

"More money is needed to run this department."

"The department needs more room and better equipment."

Answers from Small Cities and Towns.

"All girls and boys too should take home economics."

"The high school is the proper place for this work and not the elementary grades."

Answers from the Larger Cities.

"The girls do not have enough time to put on this subject."

"Have good practical teachers."

"Too much theory taught."

8. What phases of home making do you think the home economics course should include?

	Per Cent of Parents Who Favor Subject	Per Cent of Schools Which Teach Subject
Cooking	63	100
Sewing	69	100
Home nursing and first aid	6	90
Interior decorating	19	26
All home duties	5	
House care	6	19
Table service	6	100
Care of clothing	3	40
Marketing	3	29
Planning meals	4	90
Care of children	11	28
Costume design	1	35
Home management	16	40
Millinery	6	?
Budget studies	2	33
Economy	4	?
Taking care of classroom.....	1	
Food values (nutrition)	1	82
Embroidery	1	?
Canning and preserving	2	?
Health	0	59
Family relationships	0	19
Laundering	0	20
Selection of clothing	0	82
Cost of clothing	?	61

Home Projects

An effort was made to find out what pupils were doing in home project and home practice work. Fifty-four vocational schools reported 169 home projects and fifty-two nonvocational schools reported 60 projects. This would seem to indicate that every girl is carrying on a project. The projects most often undertaken are in health, clothing construction, preparation and serving of meals, care of the house, making her own room and the livingroom more attractive. Those mentioned less often were marketing and care of younger children. The home practice jobs reported by the teacher ran fairly parallel with those reported by the pupils. The home project usually involves more planning and more responsibility and extends over a greater period of time while the home practice work is repetition of a job for the purpose of strengthening habits and acquiring skill.

Home projects and home practices were reported as checked by reports from parents and pupils and by visits into the homes. It is difficult in a study of this kind to determine how well or how poorly this work is done because of the variations in the standards of living. A job well done to one person is a job poorly done to another. The fact that girls are helping a good deal with work in their homes does not necessarily mean a good carry-over in home economics, but it does mean a good opportunity for a good carry-over and the home economics teacher should make every effort to make her work felt in the homes of her community or turn the job over to some one who will.

In twenty-four schools visited, in different sections of the State, 800 girls in the seventh, eighth and ninth grades and about 200 in the tenth, eleventh and twelfth grades were asked to list the jobs which they do, or help do, at home. These are tabulated showing the per cent of girls doing the various jobs.

HOME JOBS REPORTED BY PUPILS	Grades 7-8-9	Grades 10-12
Related to Foods and Cooking:	%	%
Washing dishes	95	90
Help cook	90	75
Set table	60	30
Cook meals	10	30
Pack lunches	9	16
Special baking	5	
Related to Clothing:		
Help sew	25	16
Mend	12	12
Sew	6	16
Darn		10
Help select clothing		6
Housework:		
Make beds	60	70
Help with house cleaning	55	
Dust	25	90
Sweep	11	66
Wash up floors	17	8
Arrange and care for flowers	9	12
Wash windows	9	10
Miscellaneous:		
Laundry work—iron	40	30
Laundry work—wash	5	
Help with marketing	27	30
Banking and business		14
Care for younger children	25	10
Help keep house	12	17
Care for sick	7	
Care for pets	6	

Ninety-five per cent of these pupils said that their home economics work at school helped them to do these home jobs better.

Recommendations

1. Home economics should be incorporated in the social studies, and in the industrial arts and health programs in the elementary school.

2. Two years of home economics work for girls should be given as a requirement in the junior high school or in the grades corresponding to the junior high school. In the rural schools and in other schools organized on the 7-4 plan, cooking and food study should be given as a required subject in the first year of the high school (8th grade).

If pupils have not had this work except as a part of the industrial arts and health program, they will probably be eager to take it and at this age be able to do good work.

Many girls who drop out of high school early would get some home economics work under this plan. In schools located in industrial centers where girls have greater home responsibilities at an earlier age, home economics should be offered earlier if there is a demand for it.

3. Virginia should look forward to extending its home economics into every high school in the State. It should be offered as an elective for two years except as mentioned above.

The various high school courses should be so organized that girls taking any one of these courses will have an opportunity to elect home economics.

4. Vocational home economics has been limited by lack of funds. Thirteen schools are now persistent in their demands for this work. It should be extended as rapidly as the State can provide funds to do so.

5. Home economics teachers, while in training, should supplement their college work by such home practices and experiences as will enable them to acquire skill in the practical arts.

They should avail themselves of every opportunity to keep their subject matter up to date and to improve their technique in teaching.

6. A study of the community interests and needs should be made by the teacher as a means of adapting the home economics work to the community.

A survey of the home jobs which the pupils are doing should be made as a basis of what to teach.

Courses should be organized on the problem, project, or big unit plan, and not on the single lesson plan. The major problem should be analyzed and broken up into a number of small problems, each having a definite relation to the whole.

7. The home economics department should be well located in a school building, well heated and well lighted. A room which is too dark, cold, damp, and poorly lighted for other classroom work is not suitable for home economics work.

Elaborate equipment should be avoided. The equipment should be adequate for good work. Two rooms are better than one, because a more convenient arrangement can be worked out. The equipment should be somewhat carefully selected and always in good taste. Equipment should be bought with an idea of using it for a family rather than for individual work in order to make a home situation and get a better carry-over. Equipment should be grouped to form "unit kitchens." This makes for greater convenience in work and is more like a home job. It doesn't take any more equipment than would be needed otherwise. A group of four can work in one unit.

The fuel used should be the kind that is used in the community or at least one in which the women in the community are interested in getting. Oil stoves, when used in the majority of homes, should not be discarded because a few of the more prosperous citizens are putting in something else.

Adequate and suitable storage space should be provided.

CHAPTER LXXI

MUSICAL EDUCATION

On page 41 of the Virginia School Laws, the following statute with respect to subjects which must be taught in the elementary schools is quoted:

a. In every public free school shall be taught orthography, reading, writing, arithmetic, grammar, geography, physiology and hygiene, civil government, drawing, history of the United States, and history of Virginia. In teaching physiology and hygiene approved textbooks shall be used, plainly setting forth the effects of alcohol and other narcotics on the human system, and such effects shall be as fully and thoroughly taught as are other branches of the said last named subjects. Each teacher shall devote not less than thirty minutes of each month of the school session instructing pupils therein as to the ways and means of proper observations in connection with the course in civics and citizenship so as to prevent accidents, and in connection with the same course, may devote not less than one hour in each school session in instructing the pupils in the ways and means of preventing loss and damage to lives and property through preventable fires, and the State Board of Education shall provide a regular course of study of fire prevention for the use of public schools.

Provision shall further be made for moral education in the public schools to be extended throughout the entire course. Such instruction shall be imparted by reading books and textbooks inculcating the virtues of a pure and noble life. The textbooks shall be selected as are other textbooks by the State Board of Education. (Acts 1922, page 69, amending section 702 of the Code.)

It seems from the above that music is not a required subject in the elementary grades. Since music is not required and no appropriations are made for the study of music, it is not surprising that so little music instruction is conducted under the supervision of the school boards of the several counties.

The Situation in County Schools

Questionnaires with a letter of explanation were sent to each county superintendent, and 83 of the 100 counties returned answers.

1. Out of eighty-three counties there are reported but seven directors or supervisors of music, one full time teacher of music, and eleven part time teachers.
2. Six counties report that music is a required subject in the elementary grades, and only one requires music study in the high schools.
3. Music contests under the supervision of private teachers are reported from two counties.
4. Two other counties grant credit for music courses pursued out of school, one requiring examination and the other not.
5. Six counties, lacking organized music staffs, report a general interest in music education.
6. Twenty-five counties report that many of their pupils pay for their instruction from private teachers. In several of these counties, the schoolrooms and pianos are loaned to such private teachers for studio purposes.
7. Two counties report that the salaries of private music teachers are supplemented by the school boards, while salaries of music teachers in three other counties are paid by private organizations.
8. While choral singing is general and spontaneous, it is reported as a serious subject in only four counties not having music supervisors.

The Situation in City Schools

1. Eleven of the twenty-three cities report directors or supervisors of music.
2. Seven cities have full time teachers of music. The number of teachers of music varies from ten in Richmond and Norfolk to one in most of the other cities.

3. Eight of the cities have part time teachers of music, the greatest number of part time teachers being two.

4. In fifteen of the cities music is a required subject in the elementary grades. However, in those cities in which music is not scheduled, some informal study of music is given, usually during the assembly period. Four of the cities report that music is a required subject in the high schools. Two cities specify that music is required in the first year of high school, and one specifies that music is required in the third and fourth years of high school.

5. The number of pupils studying music does not appear to be significant. Where music is required, all of those who are enrolled study music, hence the number studying music is the total number of pupils enrolled in the elementary or high school grades of the city, as the case may be.

6. The amount of time per day devoted to the study of music in the elementary grades ranges from twelve to thirty minutes, though twenty minutes per day is the usual allotment of time. In the high schools where the amount of time devoted to music is reported by the week instead of by the day, the following variations are reported: Three forty minute periods per week; fifty minutes per week; forty minutes per week; and sixty minutes per week.

7. All of the cities in which music is taught offer chorus singing and most of them offer sight reading.

8. In nine of the cities music memory contests are held.

9. Eight of the cities allow credit for music courses completed under the instruction of private teachers who conduct their classes during out-of-school time. Four of the cities require examinations before credit will be granted for outside music courses.

Training of Teachers

The academic training of music teachers ranges from what appears to be a smattering of high school education, to graduation from a standard college. A majority of the teachers of music are high school graduates who have had some college or normal school work. The professional or musical training is of so varied a nature, that it is practically impossible to assess the preparation in general terms. Their training ranges all the way from graduation from standard colleges of music and conservatories of music, down to a few lessons with private teachers of music. So varied is the training that it would be necessary to present the record of each individual teacher before a complete picture of the training of teachers could be had.

There is evident need of more standardization in connection with the requirements: First, for teachers of public school music, and, second, for teachers of applied music. The requirements should be stipulated in terms of minimum academic preparation, fundamental applied music preparation with practical tests, and preparation in public school music, including special pedagogical training.

Recommendations

The survey staff recommend that the General Assembly shall so amend the statutes governing Virginia school laws with respect to subjects which may be taught in both elementary and high schools as to include the study of music, to be taught by such music teachers only as shall be certificated through proper examination for that purpose by the Virginia State Board of Education. Further, that such an amendment governing the certification of public school music teachers shall apply also to private teachers of applied music, whose pupils desire to benefit by the public school credit system.

The credit for outside music study, evidently aimed to fill the gap caused through lack of music study requirements, should continue in operation, but under entirely different circumstances. Whereas, reports show that a few public schools grant such credits without requiring examination, and whereas, the status of music teachers has not been established, an entirely opposite condition should exist.

No public school pupil should be permitted, in any circumstances, to receive credit for outside music study, unless his or her music teacher holds a special certificate to teach applied music issued by the State Board of Education; nor should any pupil be granted such credit without the formality of an examination.

On September 21, 1926, the Virginia State Board of Education passed a resolution accepting the services of the Virginia Music Teachers' State Association in the issuing of examinations for the special certification of teachers of applied music. This system of certification now being in full operation, there is no reason why the status of the music teaching profession in Virginia cannot be raised to a much higher plane, should the State require this form of certification as a part of its program in granting credit for outside music study.

CHAPTER LXXII

LIBRARIES AS SUPPLEMENTARY EDUCATIONAL AGENCIES

The modern library has come to be considered an indispensable part of present day educational machinery. One period of human history has been able through the agency of books to hand on to the next and all posterity its best and worst experiences as guides to like enjoyments and as words of caution against similar pitfalls. The work of the teacher would be impossible without books, and the full acquaintance with a wide range of worth while books and periodicals is in itself a good education. Most research would be next to impossible without well stocked library shelves. The mind of wholesome youth in order to be kept wholesome requires the fine things in juvenile books, and it is the duty of civilization in such an age of printing presses as this to adequately meet this worthy craving of youth.

Libraries are the continuation schools for adults, the great army of those who have passed the days of precious and often neglected privilege. More and more the sentiment grows that education does not stop with the ending of one's school days. And the most practical way to continue mental improvement is through a continued, persistent familiarity with good books. For the most of the citizenship, this need must be met by the public library, and it is largely toward this end that such an institution was created.

The Library Situation in Virginia

How adequately are the reading needs of Virginia people being met, and what is being done in the State to stimulate a healthy interest in good reading?

The best answer to these questions is found from the results of a recent nation wide survey of the library resources of America made by the American Library Association. As desirable as it might be, the time and the funds available for this study of the library situation in Virginia have made it impossible to make a first-hand survey of the 1927 status of libraries in the State. While the library situation in Virginia is slowly improving, the conditions disclosed by the American Library Association for two years ago largely continue to prevail and make unnecessary to an understanding of present needs any further extended gathering of library facts at this time.

The following pertinent facts resulting from the survey of that organization serve to give a picture of library development in Virginia:

There are forty-one* public libraries in Virginia. These afford facilities for only 28 per cent of the people of the State, leaving 72 per cent without public library service.

Sixty-eight counties are without public libraries; ten places, between 2,500 and 5,000 population, and seven places, from 5,000 to 10,000 in population, are similarly destitute.

There are no places of 10,000 within the borders of the State that do not have a public library. However, the same thing can be said of all except ten States including only forty-nine such cities in the United States.

The income available for public library service in the State is \$159,156, or seven cents per capita.

The total number of volumes in these libraries is 270,436, or approximately one volume to each nine people in the State.

The circulation of these volumes totals 839,880, or approximately one person out of every three reads a book from the public libraries during a year.

How much behind even the average State the development in Virginia is can be clearly seen from the following average figures: For the United States, as a whole, there were \$35,347,156, or 33 cents per capita for public

*Since 1925 six libraries have been organized in the State.

library service; 65,561,796 volumes, or an average of 0.62 books per capita; and a circulation of 226,142,946 volumes, or 2.13 per person. Forty-three per cent of the population, or 45,069,897, were without library service.

The position of Virginia in the several items shows a rank of thirty-fourth in the total number of libraries, thirty-first in total number of volumes in public libraries, forty-third in volumes per capita, thirty-sixth in total circulation, and forty-fifth in circulation per capita. While there are a number of States with a less creditable showing, there is not a single item in the list which reflects a creditable rating for the State. Only seven States have a higher percentage of the population without public library service.

It would not be difficult to advance many reasons for the situation. The stock one would be the devastating effects of the days from 1861 to 1865 and their aftermath. Another would be that large private collections are still abundant throughout the State, and that for those to whom reading really matters such libraries still take care of a great deal of the need. But to advance such arguments is merely to beg the question. The fact remains that familiarity with books is one of the distinguishing marks of a cultured civilization, and that it is almost as important as for the leading citizenship that the rank and file should have free access to good literature in at least reasonable abundance. And this a large proportion of the counties of Virginia are not providing.

A leaflet issued by the Virginia State Library in 1926 lists the forty-seven libraries in Virginia. Sixteen of these are supported entirely by public funds or endowments. They are as follows: Charlottesville Public Library, Christiansburg Public Library, Farmville Public Library, Wallace Library, Fredericksburg; S. S. Burdett Library, Glencarlyn; Charles H. Taylor Library, Hampton; Jones Memorial Library, Lynchburg; Norfolk Public Library; W. R. McKenney Library, Petersburg; Portsmouth Public Library; Arents Free Library, Richmond; Richmond Public Library; Virginia State Library, Richmond; Roanoke Public Library; Waynesboro Public Library, and Winchester Public Library.

Thirteen are supported by donations, entertainments, etc., but are free to the public. These are as follows: Buena Vista Public Library, Franklin Public Library, Orange Free Library, Sandston Public Library, Scottsville Public Library, Smith Public Library, South Boston Public Library, Suffolk Public Library, Waverly Free Library, King William County Library, West Point, Williamsburg Free Public Library, Wytheville Public Library, Urbanna Public Library.

Eighteen of the libraries in the State are supported entirely or largely through subscription fees. The names and locations of these are: Abingdon Public Library, Alexandria Public Library, Bedford Public Library, Hazen Memorial Library, Bon Air; Northampton Memorial Library, Cape Charles; Gloucester Public Library, Fortnightly Club, Herndon; Hot Spring Public Library, Lawrenceville Public Library, Thomas Balch Library, Leesburg; Newport News Public Library, Blue Ridge Library, Purcellville; Reading Room, Radford; Y. M. C. A. Library, Staunton; Warrenton Library, Warrenton.

To be added to the above are the forty college and preparatory school libraries, which, of course, serve mainly the students and faculty of their respective institutions. However, many of these do make their services available to the community upon the payment of fees.

There are 1,669,067 people or 72 per cent of the total population of the State of Virginia without public library service. Of this number, 1,589,364 are rural folks and 79,703 are urban.

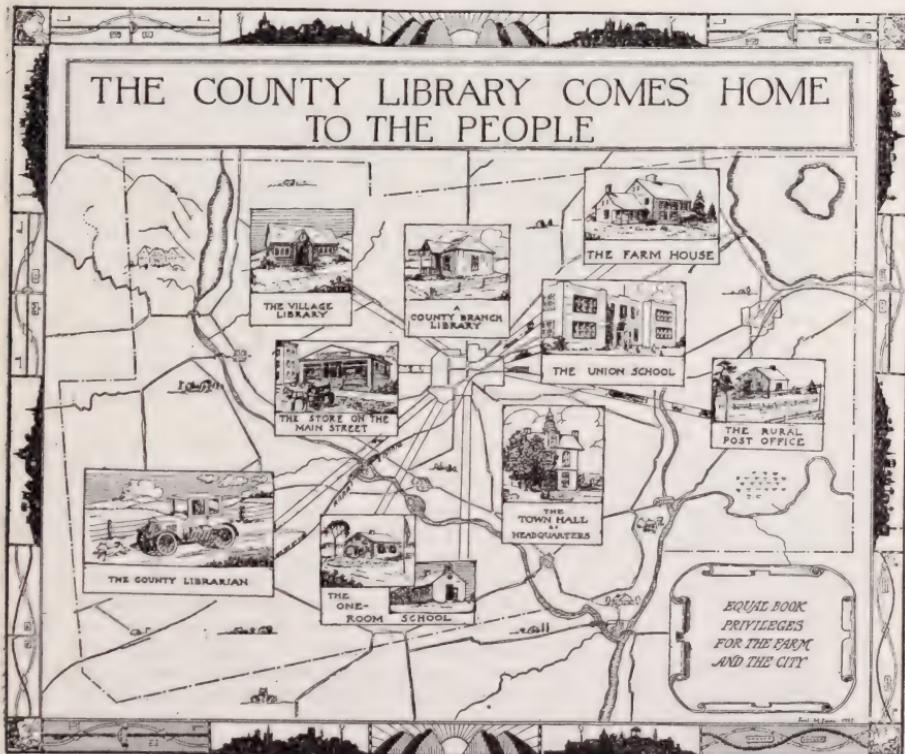
According to the United States Census definition, urban population is that residing in cities and other incorporated places of 2,500 inhabitants and over and rural population is that residing outside such places. Thus, in 1920, the total rural population of Virginia amounted to 1,635,203 and the urban figure was 673,984.

The Rural Population is Without Libraries

These figures coupled with the above signify that 96.6 per cent of the rural population of Virginia is without public library service and only 11.7 per cent of the urban population is so deprived. Conversely stated, only 3.4 rural people out of every 100 in Virginia have access to books from public libraries, while there are 88.3 out of every 100 urban dwellers thus fortunately situated.

If we believe with Lowell that "the better part of every man's education is that which he gives himself, and it is for this that a good library should furnish the opportunity and the means," then the deficiency in Virginia is a serious one, indeed. No one can over estimate the value of good books through their informational and inspirational effects upon juvenile and adult life—the beneficence of such an influence cannot be measured in terms of monetary consideration.

With the great need for further library development in Virginia thus clearly before us, it is pertinent to inquire into the existing agencies of State government which exercise library functions and serve to promote progress in this phase of the life of the State. Excluding the Legislative Reference Bureau and the Law Library as scarcely germane to the scope of this study, there are only two library agencies constituted as a part of State governmental machinery. These are the Virginia State Library and the approximately 3,400 school libraries housed in school buildings throughout the State. In addition to these, a brief consideration of libraries in State supported institutions of higher learning is appropriate.



The Virginia State Library

The Virginia State Library had its beginnings in early Colonial times. However, the first actual provision made by law for its establishment was in 1823. For many years prior to July 1, 1903, the Secretary of the Commonwealth numbered as one of his duties that of State Librarian, but on that date, in accordance with the laws passed pursuant to the provisions of the present Constitution on the subject of the library, the affairs of the institution were placed within the responsibility of a State Library Board and its administrative officer, the State Librarian.

The State Library Board of Virginia consists of five members, serving without compensation, who are named by the State Board of Education, one member being appointed each year to serve for five years. The Library Board appoints the librarian and makes the rules for the government of the institution.

The Constitution of 1902 provided that the Law Library and the State miscellaneous library should become separate institutions, the State miscellaneous library, or simply the "State Library," as it is usually known, to be controlled by the State Library Board, and the Law Library to be controlled by the Supreme Court of Appeals. Thus, the two institutions are now distinct, each with its librarian and staff. The two libraries, however, are housed in the same building. This building was erected in 1892, an annex being provided in 1908, and another in 1920.

The following quotation from the *Handbook of the Virginia State Library* gives concisely the range of the service required of this institution:

"The Virginia State Library is essentially a reference library. In its classes of books, its limited number of copies, its rare volumes, its small staff and appropriation, it is not a public library. The latter type of institution is of particular advantage to the city of its location, whereas a State Library exists primarily for ends beneficial to the whole State. The Virginia State Library exists equally for the organized State government, the schools and other cultural institutions of the State, and for the private citizen. As a State department, it exists primarily to promote efficiency in government; as a reference library, it aims to promote research; as part of the educational system of the state, it cooperates with libraries, schools and study clubs in the broad work of education. To the citizen of the State it offers books of all kinds—books for entertainment, books for instruction, books for research. It meets the demand of the citizen for a greater range of reading than his own resources or those of the local library can supply. It offers material for the special study of topics not adequately treated in small collections, as well as the special treatise required by the research of the scholar.

"This large central reserve of books, in a well organized reference and lending library, exists for the free use, either in person at the library, or through loans, or correspondence, of every person and educational institution in the State. It serves as a base of supplies upon which libraries, schools and study clubs—which are thus in effect branches of the State Library—may draw to supplement their resources. In its special fields, the library contains many books which on account of their rarity, cost, or specialized character, are to be found only in the largest libraries. Such books, with rare exceptions, can be lent within the State to promote original research or serious study. Public and school libraries may thus meet more adequately the temporary special demands of their patrons and supply material needed for the study of subjects not sufficiently treated in their own collections. Every school, every library, and all of the cultural, commercial, professional and industrial organizations of the State may depend upon the library and become, in consequence, branches of it. This inter-library loan

system, by means of which books are obtained through local institutions, supplements the traveling library system and is designed to aid the special student."

Thus, the State Library combines under one administration: Archives, reference work, the collections of Virginiana, the publication of important historical papers and bibliographical bulletins, and the library extension work, which is in two divisions—traveling libraries and the work of library organization.

Library Extension

It is the library extension work of the State Library that has in it the greatest undeveloped potentialities of usefulness to the educational system of Virginia. This branch of the State Library is in charge of the library organizer, a position created in 1922. The duties of this official are those of sending out traveling libraries of fifty selected volumes to schools and communities anywhere in the State which meet certain simple and necessary requirements, aiding in the organization of new libraries and the revival of old ones, and the collection and publication of library statistics annually for all of the libraries of the State.

The library extension work of the State Library is heroic for so limited a budget, but its real usefulness under conditions of adequate support has scarcely been entered upon. During the five years of its existence it has had a total of only \$2,000 for purchasing books to make up traveling libraries for a State of two and a half millions of people. It is small wonder that the library organizer reports: "We are greatly hampered by a lack of books. It is a great task to get together, from the books that are usable, a good library. * * * By having such a tremendous turn over, the books have to be constantly mended and recased. This work has all been done (3,173 books mended) in this department and represents a great deal of labor. It was only by constantly reconditioning these books that we were able to fill the applications for libraries."

The budget for the department of library extension in the Virginia State Library for 1926-27 totaled \$4,600. Similar work in New Jersey receives an annual support of \$72,340, in North Carolina of \$25,000 and in Georgia of \$10,000.

In order that this work may function as it should it is recommended that \$30,000 be appropriated for the fiscal year 1928-1929, \$20,000 of this to be spent for new books, and that \$20,000 be appropriated for the year 1929-1930.

School Libraries

On March 14, 1908, a bill was passed by the General Assembly which required the State to give \$10 towards the purchase of \$40 worth of public library books, provided \$15 was secured from private sources and \$15 was given by the local school board. The provisions of the bill were made possible by an enabling appropriation of \$5,000. A State appropriation of \$5,000 for this purpose was made each year from March 1, 1910, to March 1, 1914. From March 1, 1914, to March 1, 1924, the appropriation was only \$3,000 a year. Since that date, \$10,000 a year has been the appropriation for this work.

The books are bought at wholesale prices from publishers and are shipped direct to the schools by parcel post C. O. D. for postage, or by express collect. Received invoices covering these shipments are filed in the office of the supervisor of textbook, and school libraries in the State Department of Education. The teachers are notified when the orders are forwarded to the publishers, and it is their duty to notify the supervisor when all of the books have been received. Orders are often completely filled within ten days.

The cooperation of the division superintendents in this work has been excellent in distributing order forms and instructions for the purchase of school library books. During the past year (1926-1927) eight hundred and six unit libraries, worth \$33,977.64, were bought with State aid at a saving of approximately \$8,000. These orders were received from one hundred and five counties and cities. During the past year, the number of unit libraries bought showed an increase of 38 per cent over that for the year 1925-1926—a significant measure of an extending interest in this service. Reference books, encyclopedias and supplementary readers were ordered by a large number of schools.

The following table derived from the annual reports of the State Superintendent of Public Instruction shows the progress of the school library movement in Virginia during the six years from 1920-1921 to 1925-1926, inclusive. The variation in the number of schools and libraries is accounted for by the consolidation of schools, going on so actively in Virginia at the present time. Unfortunately, no figures are available showing the classification according to size of school libraries in the State. However, the steady progress of the work is shown by the increase in the number of volumes.

Public School Bulidings and School Libraries in Virginia

Six Years, 1920-21 to 1925-26, Inclusive

	NUMBER OF BUILDINGS			Number of Schools with Libraries	Number of Volumes
	White	Colored	Total		
1920-21.....	4,696	1,921	6,617	4,631	460,727
1921-22.....	5,149	1,980	7,129	3,977	496,282
1922-23.....	4,634	1,929	6,563	3,891	503,671
1923-24.....	4,463	1,945	6,408	4,447	548,798
1924-25.....	4,365	1,936	6,301	3,899	602,213
1925-26.....	4,194	1,939	6,133	3,403	642,000

It is clear, however, that there is a great loss in books from year to year. This is to be accounted for by the fact that little definite responsibility is lodged for the care of the library in most of the schools of the State, and that in most instances no one trained even in the rudiments of library methods is on the teaching staff of the school. Also, no provision is made for inspection of these libraries by the office of the supervisor of textbooks and school libraries in the State Department of Education.

While the high school situation is much better in this regard than is the case with the elementary schools, the problem is often one and the same in the consolidated school. A number even of the high schools are not provided with a suitable library room. The books are kept in the principal's office or in small library cases in a number of classrooms.

Some libraries are open during recess periods and others are open from thirty minutes to four hours a day. A few of those in high schools are open all day.

Student activities, donations and State aid have been the chief means of support. Practically all of the public school libraries have been largely dependent for their income from student activities.

The Chief Needs in School Library Work

There is urgently needed:

1. A supervisor of public school libraries in the Department of Education who will be required to devote his entire time to this work. At present his duties are largely those of a purchasing agent for textbooks and school libraries.
2. The requirement in each school in the State where there is a school library that there shall be a teacher with at least one course in library methods, with whom responsibility for the library and its management shall be definitely lodged, and who shall report at least annually to the supervisor

of school libraries on a form that he shall provide. Such a teacher should be provided extra pay or a lightened load of teaching duties for this work, the amount to be determined justly by each school.

3. A well lighted, well-ventilated library room with suitable equipment.

4. An increase in the minimum number of school library books to 500, and inclusion of a minimum list of references and standard works, before a high school may be placed on the State accredited list. A list of these books shall be sent to the supervisor of school libraries and must meet with his approval. Also, in this same requirement, provision for at least a part time librarian who shall have had at least one course in library methods.

5. An increase of \$15,000 in the appropriation for school libraries, making the total sum available for this work \$25,000.

University and College Libraries

The consideration of college and university libraries as educational agencies in the State properly belongs to the survey's study of higher education. But the libraries of the institutions of higher learning are so closely linked with the whole matter of library and educational development that reference to at least two phases of their influence on that development ought to be incorporated into this study.

The first phase concerns the equipment of the librarian. It has been recommended that the teacher in charge of a school library should have had at least one course in library methods. Where can such courses be obtained? One naturally looks to the libraries of the higher institutions of the State—and one does not look in vain. Such courses are already being effectively given in the summer quarter and extension work of the University of Virginia; instruction in library methods has been included in the work at the State Teachers' Colleges at East Radford and Harrisonburg; and there is opportunity for apprentice library work at both the College of William and Mary and at the University of Virginia and doubtless elsewhere. The adoption of the requirement of a course in library science will do much to encourage and develop the library training agencies that are already in operation; and the strengthening of such an agency as that, for example, at the University of Virginia, will help to give prestige to library work as a profession. The old notion that a liking for books and an enfeebled physique were adequate equipment for librarianship is no longer accepted by enlightened educators; and the more recent notion that the librarian's job is largely clerical is giving way before the demonstration of the scope and both technical and cultural character of the modern librarian's task. It would seem indubitable, therefore, that so far as the college and university librarian can become training centers for all librarians, so far will the libraries everywhere be strengthened as educational agencies.

The second phase is related to the first in that it concerns the position and dignity, not merely of the librarian, but also of the library itself. In this much depends, of course, on the financial support which college and university administrators are willing to give to the libraries in their institutions, and this should be much more liberal than is the case at present. The idea that the library is the center of an institution of higher learning has long been theoretically accepted. The extent to which it is practically given its place in administrative thinking and planning has a most telling effect on the general attitude towards libraries. For the conception which teachers (including teacher librarians) and citizens in general have of any library—school, county, public or college—is likely to be conditioned largely by the libraries with which they have themselves as readers and students been acquainted in their own teacher training or undergraduate days. This is an indirect influence, it is true, and leaves out of consideration the direct educational advantage for the college or university itself wherever the importance of the library as a center is stressed; but the testimony of any group of citizens really interested in the development of education is certain to reveal that, though indirect, it is a real and potent influence.

The County Library

While there is much room for city library improvement in Virginia, the main reading problem of the State is a rural one. And there are more reasons to be advanced for providing reading material for country people than for city dwellers. People living in cities have constant access to books, magazines and papers, as well as to lectures and other forms of entertainment. In the country these opportunities are largely lacking, and because of long, rainy Sundays, successions of wet days, and long winter evenings both young and old folks have wonderful opportunities for close companionship with books which can become powerful factors in their social and economic life.

As a practical means of meeting this situation, former United States Commissioner of Education P. P. Claxton says: "The only help is through the county library supported by county taxes, managed by trained librarians, having branches in all the towns and villages of the county and using the schools as centers of distribution."

The American Library Association, the deservedly well recognized leader in library matters in America, in discussing this matter explains clearly and concisely in the following quotation what is meant by the county library:

"The county library is a move to help better the community and the State. It is of a kind with the move to consolidate rural schools—to get one good school in place of a dozen poor ones, two or three trained teachers instead of a dozen immature girls. It is on a par with the move for better roads, for district nurses, for farm demonstrators. All these things are a part of one big movement of the times—the movement for rural betterment. * * * A levy on the whole county, so slight as to cause no perceptible increase in each individual's taxes, would maintain a library in a state of efficiency impossible at present for our small libraries, hampered by the insufficient revenues of a village or town tax. It would enable a county to have the services of a thoroughly trained librarian, whose business it would be to see that the whole county, to its farthest corners, received the benefits of a well selected, well administered library. Instead of the rural school library, at present too often a scant collection of books, selected by a teacher whose opportunity to know books is limited, and so ill-cared for that a year or two sees the books lost or in tatters, each school would be a deposit station of the county public library, where there would be kept a choice collection of books, so that no child on the remotest farm would grow up without an acquaintance with the very best in literature. Reading rooms in towns now unable to support them, books made easy of access in groups placed at different points of the county, or by parcels post from the central library, or even possibly by a rural book delivery wagon such as is used in the Washington county, Maryland, library; a large central collection of books well chosen and well cared for; these are the possibilities in a county library, and all at such a slight expense as to be barely felt by the average taxpayer."

The General Assembly of Virginia in February, 1924, passed "an act to authorize counties to establish county free libraries and reading rooms, and to provide for their operation and maintenance." The provisions of this act are adequate to the purpose, but during the three years since its enactment only one county free library has been established in Virginia. This is in Elizabeth City county, and was made possible by a private bequest and county support.

This rate of progress is too slow in a matter as important to the educational development of Virginia as that of county free libraries constitutes. It would appear that either too little time of the library organizer is given to this work, or that the need and opportunity are not properly presented.

At the outset only a few counties should be organized, but at least two or three full fledged county libraries should be started as soon as possible and the work thus well established in Virginia. From such a practical demonstration the example will spread rapidly.

The county library system comprehends the school library as a branch of the county library. The entire resources of the county library would then

be back of each school library, and besides, expert advice regarding book selections and purchases, as well as a practical plan of inspection would be provided.

Such a relationship is the practical and desirable one in evolving a constructive library policy for Virginia. But under the present administrative arrangement, such a coordination of activity is impossible. The school libraries are administered in the Department of Education and the county library work originates from the efforts of the library organizer in the Virginia State Library, a separate department of the State government.

In this connection the wisdom of the recommendation of the Bureau of Municipal Research in its January, 1927, report on "Organization and Management of the State Government of Virginia" becomes apparent and provides the best way to consolidate the two library extension agencies of State government.

That report says:

"The State Library, the Law Library at Richmond, the legislative reference work, and the traveling library work should be brought under the proposed Department of Education. Each of these related functions is now under separate direction, and in the case of the Law Library poorly administered. The State Library is under a constitutional board of directors, appointed by the State Board of Education. The librarian of the Supreme Court of Appeals, who has charge of the library, is also a constitutional officer. The Constitution should be amended to abolish both of these agencies, so the work can be consolidated under the Department of Education."

Such a step would properly correlate the work of school libraries and the library extension activities of the Virginia State Library. It would serve to emphasize what is now generally recognized as a fact; that the public library is really a very important integral part of public education. Such a development can do as much as anything possible to stimulate all forms of library development in the State.

The State Library has the tools, experience and technical knowledge to conduct library campaigns, provide literature, pass upon library organization, location, equipment, etc.; qualification and certification of librarians, inspection of all libraries including the county libraries, receiving annual reports therefrom; and to supplement book resources of all libraries in the State, by lending unusual books, etc. In other words, the State Library should be made the clearing house for all library activities in the State.

The county support for library purposes to be adequate should amount to one dollar for each citizen of the county, though a beginning can be made on fifty cents per capita. It is perhaps unwise to have the State provide a mandatory tax levy for this purpose, though such a measure would be highly desirable in results, and in a year or two would bring into existence a county library in every county in the State.

While the main burden of library support must rest upon the county and city, there should be State aid available for all of the libraries of the State in the form of grants for the purchase of books. It would be advisable at the time of its establishment to grant to a county library from \$1,000 to \$5,000 for books, according to its need, establishment, population and the schools to be served. The books bought by State money should be from approved lists from the library extension division of the State Library.

With a total appropriation of \$55,000 for the first year and \$45,000 the second year for the present library extension department of the State Library and the school library division of the State Department of Education merged and operating under the general policies outlined in this report, the library progress of the State should go forward by leaps and bounds, thereby improving a seriously neglected phase of the educational life of the State.

CHAPTER LXXIII

COOPERATIVE EDUCATION ASSOCIATION OF VIRGINIA AS A SUPPLEMENTARY EDUCATIONAL AGENCY

In the early years of the twentieth century, and especially following the adoption of the State Constitution in 1902, progressive citizens throughout the Commonwealth began the agitation for some concerted effort for the improvement of the educational, civic and economic conditions of the State. As a result of this growing desire, Governor A. J. Montague called together early in the year 1904 a group of representative men and women from every section of the State to meet in the city of Richmond. The leaders assembled were unanimous in their decision that the need was great and the time ripe for a real forward movement in the cause of education. They agreed to band themselves together in a permanent organization and start to work with the purpose of giving the childhood and youth of Virginia a better chance for common and high school education.

An organization was perfected. The name decided upon was the Co-operative Education Commission of Virginia. This was later changed to the Co-operative Education Association of Virginia. Dr. S. C. Mitchell was elected as the first president. This group of leaders held two meetings during the summer of that year and then held a large meeting in the fall with the educational leaders of the State in the city of Norfolk. At this first annual meeting in Norfolk, the Cooperative Education Association decided to conduct a State wide campaign in the interest of better educational, social, civic and economic conditions—this campaign to be put on in May, 1905. Dr. Robert Frazer, the field agent of the association, in speaking of the results of the May campaign in his report in November, 1905, said:

"A hundred of our ablest speakers enlisted in the campaign. Popular meetings were held in ninety-four counties; altogether there were one hundred and eight of these meetings and more than three hundred addresses were delivered. For the use of our campaign speakers and distribution among the people there were issued some two hundred thousand pages of educational literature. The press of the State, both religious and secular, gave the movement generous support. The expenses of the campaign were provided for by volunteer contributions by the people of Richmond.

"Before the May campaign there were in all the State probably not more than twenty-five school improvement leagues, now (December, 1905) there are two hundred or more, embracing in their membership thousands of men and women who stand ready for the high service to which their organization commits them."

In speaking of the success of this campaign later on, the leaders of the State wide educational campaign in 1925 said: "The May campaign of 1905 was inspired by recalling the splendid results of the May campaign of 1905, when the people of Virginia waked up to a new and intensive interest in education. The progress of education in Virginia dates from the May campaign of 1905."

As stated above, the Co-operative Education Association was organized by the people of Virginia to meet Virginia's needs. It has been working diligently at this task since the beginning. The real purpose has been and is to help the people to help themselves. The leaders and their successors have acted on the belief that if the people in the local community were made to realize that through sympathetic cooperation they could greatly improve the educational, social, civic and economic conditions of the community that these people would unite and work for the accomplishment of such objectives. The results of the labors of nearly a quarter of a century have very clearly demonstrated that the leaders of the association were justified in having such faith in the citizens of the local communities.

The Cooperative Education Association from its beginning set before it some very definite and concrete objectives. These objectives have not all been attained and necessarily as the years have passed by some changes and additions have been made. The first objectives were as follows:

1. A nine months school for every child.
2. A high school within reasonable distance of every child.
3. Well trained teachers for all public schools.
4. Efficient supervision of schools.
5. The introduction of agricultural and industrial training into the schools.
6. The promotion of libraries and correlation of public libraries and public schools.
7. Schools for the defective and dependent classes.
8. The organization of a citizen's education association in every county and city.

Preceding and immediately following the May campaign, the Cooperative Education Association had as a definite purpose the uniting of all the educational forces of the State in one comprehensive plan of organization. At the meeting in Norfolk in the fall of 1904, plans were made for another meeting the following year in Lynchburg to further develop State wide cooperation. The superintendents, at their conference held in July of 1905, discussed the need for a State educational association which had been proposed by the Cooperative Education Association and they stated in a resolution: "We are of the opinion that the particulars of the organization of the State education association here recommended should be left to the Cooperative Education Association."

As a result of this effort, the first State educational conference was held in Richmond in November, 1906. Ex-Superintendent of Public Instruction, Dr. J. D. Eggleston, in his report to the State Board of Education, said, with reference to that conference:

"In November of 1906 a conference of all the educational forces of the State was held in the city of Richmond. About sixteen hundred delegates were present, representing private and denominational institutions, the higher State institutions, the teachers of high schools and primary and grammar grades, division superintendents, school trustees, county supervisors, members of citizens' improvement leagues and others.

"Not only were the existing educational organizations, the Cooperative Education Association, the State Teachers' Association, and the Superintendents' Conference, greatly strengthened and encouraged, but the trustees of the State banded themselves together into an organization that has already proved vigorous and helpful.

"I desire to express the appreciation of the Department of Public Instruction for the valuable financial aid and splendid moral support given by Mr. Joseph Bryan of Richmond without whose encouragement this conference would probably have been impossible." (Mr. Joseph Bryan was a member of the small group of citizens who were at that time furnishing the financial support for the Cooperative Education Association.)

From the beginning, the Co-operative Education Association has been very closely associated with the State Board of Education. In fact, the State Board of Education and the educational workers throughout the State are largely responsible for its great development. The work has always had the supervision of the State Superintendent of Public Instruction. Its reports for a number of years were published in the annual report of the State Superintendent of Public Instruction. Practically all of the printed material was supplied by the Department of Education in the early days. It was through the leadership of the State Superintendent of Public Instruction, Dr. J. D. Eggleston, that the Southern Education Board was prevailed upon to give its cooperation with the Department of Public Instruction and a group of citizens in Richmond in providing for a necessary increase in the financial support of the association. The Superintendent of Public Instruction has always been chairman of the executive committee of the Cooperative Education Association.

The first office provided for the work of the association was furnished by the State in the Capitol building, and the State has provided an office constantly ever since that time except for a brief period when practically all State departments had to be maintained in rented quarters. As the State departments of Health,

Welfare, etc., were established, the heads of these departments became members of the board of directors of the Cooperative Education Association. The charter granted by the State some years ago provided that the Governor of the State, Superintendent of Public Instruction, and Commissioners of Agriculture, Health, Welfare and Highways, the State Librarian and the State directors of agriculture and home demonstration work should be members of the board of directors of the association. The Superintendent of Public Instruction, as indicated above, is by choice of the association and by provision of the charter, chairman of the executive committee. The Governor and the heads of these State departments are also members of the executive committee. Other members of the board of directors are elected at the annual meeting of the association by the representatives from the local organizations who are in attendance at the annual meeting. The plan of organization provides for the very closest cooperation between the heads of the various State departments and the citizens of the State. Such a plan necessarily is in the interest of cooperation in the county and in the local community. In fact, this cooperation from the heads of the departments down to the local communities has been a large factor in the remarkable success of the work.

For several years the various State departments gave assistance in providing printed matter and all other helps they could in caring for the expenses of the association. It was decided, however, that it would be better to have this support go directly to the association by State appropriation than to go indirectly through several departments. Accordingly, in 1921 the State provided an appropriation of \$3,500, which appropriation has been continued ever since.

The purpose of the Cooperative Education Association from the beginning has been so to unite the citizens and the teachers and other school leaders that they might work together through the school as a community center for all needed improvements in school and community. The plan is to have in every school community an organization of the citizens and the teachers. Then the next step has been to unite these local organizations in county and city federations.

The next plan promoted was to provide for the boys and girls in the schools to have definite training in citizenship. Thus, provision was made for the organization of junior community leagues in the schools. These organizations unite the pupils and teachers in such a way that all extra curricular activities of the school may be promoted through one student organization.

A later development was to unite the official and unofficial leaders of the county in what might be termed a county wide clearing house. The name of this organization is the county council.

Beginning in 1904, the Cooperative Education Association has held regularly an annual State meeting. Since the organization of the State Educational Conference in 1906, this meeting has always been held in connection with that conference. Each local organization in the State has the privilege of sending representatives to this annual meeting.

An effort is made to have an annual meeting in just as many counties and cities as possible so these local workers may keep in touch with each other and plan for work that needs to be done on a county wide or city wide basis.

The State is divided into eleven districts, and in each of these the association endeavors to have an annual meeting. At the district meeting the district officers, such as district chairman, vice-chairman and secretary are elected. In the county, district and State meetings provision is made for separate sections for the junior league representatives.

The Community League

While the local organization may select any name it desires, and there are many different names, the association decided some years ago that it would be well to use the general title, Community League, as a comprehensive name in speaking of the work of these organizations. Many of them go by the name of Community League, others are called Civic League, School League, Home and School League, Civic Association, Parent-Teacher Association, etc.

The local organization, composed of the teachers and citizens, is furnished with a plan of organization including a constitution and by-laws (each local organization is permitted to make such changes as it deems best to meet conditions), and suggestions are constantly placed before these organizations with reference to the work which should engage their attention. The purpose is to have one organization of the teachers and citizens in the community which will not only do the work right at hand, but will cooperate with all county and State leaders in the promotion of the work of these official organizations in the locality.

It is suggested that each local organization shall have the following committees:

Education.

Health

Farm and garden.

Civic and home improvement.

Highways.

Church and welfare.

The educational committee works for the improvement of the school building and its surroundings, for better attendance and for better educational conditions in general. Through the leadership of this committee the leagues have done much for the improvement of educational conditions, such as providing for the lengthening of the school term, supplementing the teachers' salaries, enlarging or improving the school building, securing additional school grounds, purchasing libraries, providing for janitor service, purchasing pianos and other musical equipment, encouraging the closest cooperation between the teachers and parents, providing for lecture courses and other features of adult education, and doing any other work which the teachers and citizens feel will improve the educational conditions.

Through the health committee the league takes up such matters as better sanitary conditions about the school and its surroundings, better sanitary conditions in the community and in the home. It provides for health clinics, such as dental, tuberculosis, tonsil, and others. It cooperates with the city, county and State health authorities in the prevention of disease. The leagues hold health meetings, assist in the Red Cross campaign and sell tuberculosis Christmas seals. One special phase of the work is the holding of clinics for preschool children in order that these children may be physically fit to enter school. The league often provides hot lunches for needy children, and in many cases the league operates the lunch room entirely.

The farm and garden committee of the league cooperates with the agricultural leaders and agricultural organizations. (If there is a local farmers' union the suggestion to the league is that the officers of the farmers' union compose this committee.) By encouraging diversification of crops, the leagues give support to the agricultural agents in the effort to have better all round farming conditions. They encourage home gardening, organization of boys and girls club work, the preservation of fruits and vegetables for home use. The league usually holds at least one or more agricultural meetings during the year.

The civic and home improvement committee of the league seeks to interest the community in general civic improvement, such as better play grounds, better parks, attractive public buildings, and good lighting conditions in the towns and cities. This committee cooperates with the home demonstration agent in the program of home improvement and the improvement of home surroundings.

Through the committee on roads and streets the league seeks to improve highway conditions. In the rural sections they cooperate with the boards of supervisors and State highway workers in securing better roads for the community. Very often the league will raise a sum of money to aid in the improvement of roads leading to the school building or to the church or some important community center. Often a league will raise the entire funds or do all the work for the improvement of a piece of road in the neighborhood. The leagues hold good road meetings and otherwise promote interest in better highways. In the cities they work especially for the improvement of streets and sidewalks and for keeping the streets clean.

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The next plan promoted was to provide for the boys and girls in the schools to have definite training in citizenship. Thus, provision was made for the organization of junior community leagues in the schools. These organizations unite the pupils and teachers in such a way that all extra curricular activities of the school may be promoted through one student organization.

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In many communities the community league is the real welfare organization. Each league is expected to have a welfare and church committee. This committee cooperates with the board of public welfare of the county or city and the juvenile judge. This committee cooperates with the church leaders for the improvement of the church buildings and grounds and for the upbuilding of the Sunday schools of the community, and seeks to develop better moral conditions in every way.

The executive committee of the league is composed of the officers and chairmen of standing committees. This committee works out the general program of objectives and plans for the all round development of the league work. Any activity that needs to be undertaken by the league may be assigned to a regular committee or special committee, or the executive committee may look after it. This executive committee usually plans for a number of special meetings during the year, makes out programs for the regular monthly meetings of the league and attends to the general business of the league. Through this committee the league stands ready to cooperate with any other organization which is working for the upbuilding of the school and community.

The County and City Federation

As previously noted, the plan of organization provides for a county or city federation of the leagues. The purpose of such a federation is to develop a program of cooperation on a county wide or city wide basis. The officers of the federation keep in touch with the local organizations and aid them in developing their programs of work. This federation has an annual meeting at which time all the leagues, both community and junior, are expected to make a report of their work and at which time plans are made for future work in the county or city. Programs which call for cooperation of all the leagues are discussed and passed upon at these meetings. The executive committee of the federation is composed of the officers and chairmen of committees and the full time workers in the county or city, such as the superintendent of schools, nurse, health officer and farm and home agents. Through this executive committee the effort is made to establish new leagues and to keep all the leagues thoroughly active.

District Organization

In each of the eleven educational districts, there is a district organization with a chairman, vice-chairman and secretary. These officers seek to develop the work in the counties and cities by encouraging annual meetings and by helping to secure active officers for the counties and cities. The district organization holds an annual meeting at which time the representatives are expected to be present from all the leagues in the district to make reports of the work done and discuss future work.

The Junior Community League

In developing the work among the citizens, it was found advisable to provide for the training of future citizens by giving the boys and girls in the schools a chance to cooperate with the school and the community. Through the encouragement of the educational leaders of the State, the Co-operative Education Association undertook the organization of junior community leagues. This work was started in 1910. In the effort to secure funds to more adequately develop the work, friends of the association, in 1918, brought the matter to the attention of the Carnegie Foundation. This foundation was cordial in its response and granted a substantial annual appropriation for a period of five years.

In the elementary schools and the combined elementary and high schools where the student body is small, the junior league is composed of the boys and girls from the fourth grade up. In the larger schools, where the high school enrollment is large enough to justify two organizations, there is usually one organization for the higher elementary grades and one for the high

school. The purpose of the junior league is to bring about closer cooperation of the students and the faculty in all extra curricular activities. It is under the direct supervision of the principal of the school. The junior league affords an opportunity for developing the various activities of these young people through this one organization. It is suggested that where there is an athletic association, literary society, boys and girls club, etc., that the officers of these organizations compose the various committees along these lines of activity. The junior league thus becomes the coordinating agency for all activities.

The association supplies the junior league with possible suggestions for its activities, constitution and by-laws and helps in every way to direct these young people in their activities.

The junior league is expected to have the following committees:

School improvement.	Athletics and recreation.
Health.	Club work.
Self improvement.	

The educational committee is expected to work with the teachers in doing all those things that would make the school and its surroundings comfortable and attractive. It helps to secure good discipline and assists in keeping the school grounds and building clean, and does whatever the league and the faculty may feel is for the improvement of the school. It also encourages literary society work. Through this committee the junior league, either by its own efforts or with the cooperation of the community league, does much for the enlargement of the school library.

The health committee seeks to cultivate good health habits among the children, aids in the work of the clinics, seeks to improve the sanitary conditions, to keep all outbuildings of the school neat and sanitary and cooperates with the nurse and health workers in any health work which they consider best for the school and community.

The committee on athletics and recreation is expected to encourage all the pupils of the school to participate in some form of recreation. It encourages team work and clean sport, helps to secure playgrounds and athletic equipment and cooperates in building up the athletic and recreational activities of the school. This committee usually provides for some special day occasions during the year.

If the boys and girls club work has been established in the community, the officers of these clubs usually compose the committee on this activity of the league. It gains for the club members support of the student body in their effort to carry on their club work.

The self improvement committee is expected to promote any of those objectives among the boys and girls which will aid them in self improvement, such as the reading of good books, making of good records in the school, the development of their personality and in establishing high moral ideals.

The junior league cooperates with the adults in the community league for the improvement of the school and its surroundings. They learn how to participate in any unity projects, how to preside over meetings, how to cooperate on a large scale, and how to use parliamentary rules.

The County Council

The purpose of the county council is to provide a clearing house organization for the county in order that the greatest program of cooperation may be carried out with the least duplication of effort.

A State Country Life Conference was held in Richmond on the call of Governor Westmoreland Davis in 1921. One of the results of this confer-

ence was the suggestion that the Cooperative Education Association seek to organize in the counties the official and unofficial leaders in such a way that they might cooperate to the best advantage. It was decided to call such a county organization a County Council of Conference and Cooperation. The Laura Spelman Rockefeller Memorial Foundation became interested in the work and provided sufficient funds for an experiment to be made. In order to work out the experiment more concretely the county council has been organized and developed in several counties and the plan has worked very satisfactorily. The county council is composed of the county officials, the full time workers, such as county superintendent of schools, county agricultural agent, home demonstration agent, public health nurse, public health officer, judge of the juvenile court and any other full time county workers, and one or two representatives from each county wide organization, such as the county school board, county board of supervisors, board of public welfare, county teachers' association, county federation of community leagues, farmers' union, the county medical association, county organization of the Red Cross, and all other county wide organizations. The council does not endeavor to initiate work, but seeks to bring before the group the work of new organization and each official in order that all agencies may know thoroughly the work of each agency and thereby eliminate all duplication of effort.

Child Study

The leagues are urged to give special attention to the study of the characteristics and needs of childhood and youth. It is suggested to all of the leagues that they plan for preschool clinics in order that children may have a physical inspection, and parents have an opportunity to have defects corrected before the child enters school. Many of the leagues conduct regular study groups for the purpose of very thoroughly understanding the needs of children. Through the leagues mothers are enrolled in the mothers correspondence course conducted by the State Department of Health. Last year in the city of Richmond there were conducted under the direction of the association, six child study centers under very efficient leaders. Each of these groups held eight meetings during the year and more than two hundred mothers attended.

Publications

The Cooperative Education Association provides a handbook for the community league in which it presents plans for organization, constitution and by-laws, suggestions for committees and makes suggestions with reference to programs. A similar handbook is also provided for the junior leagues. A bulletin is published which presents the plan of organization for a county council, constitution and by-laws, and suggestions with reference to the work of a council. Through the cooperation of the United States Commissioner of Education, a bulletin has been published which gives suggestions for programs and helps for the leagues. Through the cooperation of the University of Virginia, a booklet is published on citizenship. This booklet is especially for the junior leagues and presents helps and suggestions for those who are developing citizenship programs in the local schools. There is published annually a yearbook which gives a summary of the work done by the leagues, both community and junior, and county councils. This yearbook also contains many suggestions for a local league with reference to the development of its work. A monthly paper, the Community League News, is published.

Employees

The association employs an executive director, a junior league secretary, and two full time workers in the office. During the fall months when the work is unusually heavy, an extra worker has to be employed in the office and an extra worker placed in the field.

Connections

The Cooperative Education Association, as has been indicated before, cooperates in the very closest way with all the State departments and as far as possible with every other State wide agency that is working for school and two full time workers in the office. During the fall months, when the National Community Center Association, the American Country Life Association, the National Education Association, the National Conference of Social Workers, and the Child Study Association of America.

Summary of League Work for Year 1926

Community leagues in State	968
Junior leagues in State	654
	<hr/>
	1,622
Number community leagues reporting	562
Number of junior leagues reporting	459
	<hr/>
	1,021
Membership of community leagues	31,098
Membership of junior leagues	37,313
	<hr/>
	68,411
Number of banner community leagues	151
Number of banner junior leagues	137
	<hr/>
	288
Community leagues reporting school work	472
Junior leagues reporting school work	350
	<hr/>
	822
Community leagues reporting health work	389
Junior leagues reporting health work	340
	<hr/>
	729
Community leagues reporting road work	155
Junior leagues reporting road work	105
	<hr/>
	260
Community leagues reporting agricultural work	204
Junior leagues reporting agricultural work	219
	<hr/>
	423
Community leagues reporting social and civic work	372
Junior leagues reporting social and civic work	327
	<hr/>
	699

Number of community leagues paying dues	402
Number of junior leagues paying dues	224
	626
Amount of dues paid by community leagues	\$ 937.86
Amount of dues paid by junior leagues	357.79
	\$ 1,295.65
Christmas seals sold by community leagues	\$ 3,022.14
Christmas seals sold by junior leagues	2,966.47
	\$ 5,988.61
Amount raised by community leagues	\$149,170.86
Amount raised by junior leagues	32,422.45
	\$181,593.31

We present herewith some details from the above summary which will indicate the great range of activities of the leagues:

Number of leagues which purchased school equipment	99
Number of leagues which bought or made payments on piano.....	22
Number of leagues which extended school term	36
Number of leagues which purchased laboratory equipment	10
Number of leagues which purchased chairs for auditorium	10
Number of leagues which paid janitor's salary	16
Number of leagues which purchased books and equipment for library	200
Number of leagues which beautified and improved school grounds..	133
Number of leagues which purchased playground and athletic equipment	78
Number of leagues which improved and made additions to school building	100
Number of leagues which erected new stage and equipped auditorium	37
Number of leagues which supplied facilities for transportation of pupils	2
Number of leagues which put fire escapes on building	3
Number of leagues which served hot lunches and milk	42
Number of leagues which put on clean-up campaign	45
Number of leagues which secured general clinic	22
Number of leagues which secured dental clinic	41
Number of leagues which secured tuberculosis clinic	3
Number of leagues which secured toxin-antitoxin clinic	17
Number of leagues which secured tonsil and adenoids clinic.....	4
Number of leagues which secured preschool clinic.....	4
Number of leagues which had water supply analyzed	6
Number of leagues which installed cafeteria in school	3
Number of leagues which installed pump, well or drinking water system	54
Number of leagues which furnished rest room	10
Number of leagues which entered exhibits in county fair	8
Number of leagues which purchased light plants	20
Number of leagues which visited sick and carried flowers and trays	16

Number of leagues which gave material aid to neglected and dependent	56
Number of leagues which improved Sunday school and church building	20
Number of leagues which improved the neighborhood road	50

In one county the leagues provided for the entire support of the schools for a period of four months in order to enable them to run the full time.

State Appropriation

The Cooperative Education Association is requesting the State to increase the annual appropriation from \$3,500 to \$6,000. It is almost imperative that the association secure this small increase of \$2,500, if the work is to proceed as efficiently as at present. This need is upon us because appropriations from the Carnegie Foundation and the Laura Spelman Rockefeller Foundation, which have been largely supporting the work for the past few years, have practically come to an end. The Carnegie Foundation ended in 1924. The Spelman Foundation appropriation has been reduced annually and we will receive only \$2,500 from that foundation for 1928. When the Carnegie Foundation appropriation ceased, the citizens of Richmond increased their contributions to help take care of that situation. We cannot ask them for a larger increase. In order to take care of the loss of the support of the Spelman Foundation, it will be necessary for us to raise this by individual contributions and by an increased State appropriation. Both of the above named foundations were very sure that the value of the work to the State was such that after their support was withdrawn, the State and individual citizens would make adequate provision for its continuance on its present basis of efficiency.

The State receives the full benefit of all the work done by the association. All money received by the association from whatever source, has always been expended under the supervision of the State Superintendent of Public Instruction. The local organizations are working for the improvement of the school, health, welfare, agricultural, highway, and economic conditions. During the past five years these local organizations have raised and expended more than a million dollars for school and community improvements, which could not have been secured otherwise. A prominent leader of the State said before the Budget Commission that he was thoroughly convinced that the State derived greater returns from the small appropriation to the Cooperative Education Association than from any similar amount appropriated to any other department or organization.

A former Governor of the State called together the representative citizens who organized the Cooperative Education Association. The State provided the first office the association ever had and has continued to do so ever since. A former State superintendent secured the first substantial funds for the work of the association. For several years the State departments of education, health, welfare, highways, and agriculture gave all the assistance they could to the work. In 1920, it was decided best just to make a direct appropriation rather than to make this indirectly through the State departments. That policy has been continued since.

The Governor of the State and the heads of the State Departments of Education, Health, Highways, Agriculture, and Welfare, and the State Librarian are, by provision of the charter granted by the State, members of the board of directors of the association. These leaders are also members of the executive committee.

The funds are used to employ workers, to maintain an office with its necessary records and office work, to pay the traveling expenses, to provide bulletins and necessary printed matter for the promotion of the work.

CHAPTER LXXIV

THE VIRGINIA CONGRESS OF PARENTS AND TEACHERS AS A SUPPLEMENTARY EDUCATIONAL AGENCY

For more than six years—since April 2, 1921—the Virginia Congress of Parents and Teachers has been in operation as a State organization. Just previous to that time, at various points in the State, there were about twenty nationally affiliated units which became charter members of the State branch of the National Congress of Parents and Teachers. Besides these units, there were about forty communities represented at the State organization meeting as charter members. The Virginia Congress now has more than 10,000 members and a record of three or four times that number of citizens who have sat in its meetings and have voluntarily offered their assistance in promoting its activities.

Entirely Democratic

It was the imperative need of a distinctive child welfare agency with an individual national membership plan, entirely democratic, in the educational development of Virginia, that prompted the leaders in Virginia to form a State branch. Statistics brought out during the World War and the conditions pertaining thereto, impressed on the minds of the leaders the inadequacy of spiritual and material facilities in Virginia for the development of the whole child. In 1920 education in Virginia seemed much in need of improvement and can well be stated in the words of Mrs. Reeve, national President, regarding the general education situation twenty-five years ago:

"Twenty-five years ago education, like medicine and law, was the business of specialists, and the only concern of the public was to pay the bill—if it could and would. The school was a sphere apart, related neither to the home whence its pupils came nor to the community into which they graduated. Its directors formed a close corporation, and the vote of the citizens was neither required nor desired in the administration of its affairs."

A Timely Organization

It was a most opportune and propitious time to launch the movement to bring about the changed condition for which the Virginia Parent-Teacher effort is certainly paving the way and doing a part. Workers whose hearts and hands had been trained for world tasks by participation in war activities were waiting in every part of the Commonwealth for some peace undertaking worthy of their time and attention. The practicability of beginning to improve these educational conditions by creating a more favorable environment and improved facilities for the development of the whole child met with instantaneous and universal approval. It was not difficult to find enthusiastic members for the Virginia Parent-Teacher movement in any community where it was possible to carry the message. Virginia has seemed hungry for this new order in educational cooperation, and although it may seem, and is, a long, slow process, this seven and more years of trying to arouse Virginia to the consciousness of this necessary unity in education is proving a reality. It may be developed until it completely covers that "no man's land which now lies between the average home and the average school." The Virginia Parent-Teacher movement is accepting and must further accept the challenge to bring about a new day of opportunity for children in Virginia.

The State Congress a Branch of the National Congress

In the early days of the Virginia branch its peculiar strength was in the fact that its program, its aims, and its ideals were those that had been developed through a generation of effort in the great national movement—the National Congress of Parents and Teachers. Financial aid to the amount of \$1,400.00 used in paying the salary and expenses of a part time field secretary was given by the national organization and by the national president personally. This afforded invaluable assistance in carrying the movement into a large number of Virginia communities just before and just following the State organization meeting. The proximity of the State to the National office in Washington, D. C., has made the closest cooperation possible during the period of the greatest growth and public interest in the National organization itself. Large quantities of literature from the national organization have been sent out over the State through the State office, keeping the local units in Virginia informed as to the most notable educational achievements in other States, and offering practical ideas for carrying on the work. These have been gleaned from successful experiments and experience in all sections of the country. A number of visits from the president and other members of the national board, who have reviewed and encouraged the work in Virginia, have been of great benefit to the State Parent-Teacher work.

Independence of State Branches

It is the policy of the National Congress of Parents and Teachers to urge that each State develop its work along lines best suited to its particular needs, relying on the fine help and cooperation of the national movement in accomplishing any child welfare program in keeping with its policies and plans. The national, through its State branches, is conducted for one purpose only—to promote the interests of children individually and collectively. The national operates only through its State branches. It seeks to discover the methods and principles which will enable parents, teachers, and all other citizens to work together and continuously for the improvement of all conditions which affect child life. It is demonstrating that in the field of child welfare as in every other field of human activity, cooperation is the key note of progress. The parent-teacher movement is nonsectarian, nonpolitical and nonjoining. It is a voluntary organization actively engaged in a definite program of educational work. All of those interested in its objects may become members. The objects of the National Congress of Parents and Teachers which are uniform in the national, State, and local units, are as stated in the by-laws.

Objects Comprehensive

1. To promote child welfare in home, school, church, and community; to raise the standards of home life; to secure more adequate laws for the care and protection of women and children.
2. To bring into closer relation the home and the school, that parents and teachers may cooperate intelligently in the training of the child; to develop between educators and the general public such united effort as will secure for every child the highest advantages in physical, mental, moral, and spiritual education.

Home and School United

In order to attain these objects a definite program of service has been organized for the home, school, and community, since these factors must always be reckoned with in the education of the child. *The National Congress of Parents and Teachers is the originator and promoter of the movement to establish a parent-teacher association in every school.* In the current issue of the Child Welfare Magazine—November, 1927—the editorial gives this interesting statement regarding the growth and objectives of this move-

ment. "The separation between layman and expert has been wide. The first rush across the bridge built by the parent-teacher movement took on somewhat the nature of an invasion. Ignorance of the school system, of educational requirements and the demands of a most exacting profession, resulted inevitably in blunders, errors of judgment, and frequently in positive aggression, which were met with indifference, resentment or active opposition. But through experience came enlightenment; from contact developed confidence and mutual respect, and today hundreds of thousands of men and women, who have subscribed to the standards and methods of a vast national organization, have united in a program which brings to each the support and cooperation of the other. Home and school are one as to objectives, and the long road to the attainment of them should thus be shortened by many a weary mile."

Virginia Must Solve Its Own Problems

Some of the organization problems met with in Virginia have been found to be of a type uniquely difficult in the experience of the National congress in other States, notwithstanding the fact that Virginia in 1897 had seven appointed and visiting delegates at the organization of the national movement. In these difficulties, Virginia leaders, through the parent-teacher membership, have been the only ones who could solve these particular difficulties and their decisions have been endorsed by the National Congress. Invaluable service was rendered to the Virginia branch by Miss Frances Hays, now national extension secretary, who made a survey of the Virginia Congress previous to the summer of 1926. It should be stated here that in every move of importance made by the congress, Virginians not connected with the Virginia State branch, but representing both the professional and lay citizens, were invaluable to the movement.

State Office Service

Just as the national office is invaluable and always ready to respond to calls from the States, so the Virginia parent-teacher office, maintained in Roanoke since the organization of the State branch, is now ready to meet the demands of 220 local units established throughout the State. In the past a very large proportion of the office work as well as the organization work in the cities and rural communities has been done by the president. However, during some of the particularly busy seasons help has been volunteered by persons interested in the organization or small funds have been raised to finance a portion of the tremendous amount of secretarial work accomplished in the State office.

Organized in 1921

For the meeting on April 1 and 2, 1921, at which the Virginia branch was formed, representatives from every section of Virginia were called together by the Roanoke chairman who had been appointed by the national president. The meeting which was held in the Lee junior school was attended by the State Superintendent of Public Instruction, the president and past president of the National Congress, and a large delegation from all over the State.

An outstanding piece of work had been done in Roanoke. The State president while serving as chairman of the education committee of the Woman's Division of the Chamber of Commerce put the program of parent-teacher work before its committee, and it had been adopted. The Chamber of Commerce gave official approval to the plan of the education committee as well as did the Roanoke Ministers' Conference. Mrs. John Miles, secretary of the woman's division, gave much time to assisting the Roanoke chairman in the Roanoke work, and the education committee was very active. Three hundred dollars was appropriated by the Chamber of Commerce which was used to bring Mrs.

Frederick Schoff, national president, and speakers from Bristol and other places for the ten day parent-teacher program of organization in Roanoke. The chairman was made president of the Central Council of Parent-Teacher Associations in Roanoke. She had learned of the value of the local parent-teacher work through local members of the Bristol, Tenn., parent-teacher group, having lived near-by in Bristol, Va. It was in that city that she learned first about the national movement from Mrs. Eugene Crutcher, of Tennessee.

The work done in Roanoke through the splendid publicity of the *Roanoke Times* led to invitations to the chairman to organize local parent-teacher units in near-by communities, and letters were received from previously organized units in Virginia saying: "We might get together in this work." These facts added action and accomplishment to the desire to give to Virginia the parent-teacher movement. The national president was then asked to send a secretary to answer these calls in Virginia. The organizer for the national was not available at that time on account of illness, and these calls were filled because of interest in the parent-teacher program. Later, a Virginia woman was secured as organizer for three months at a salary of \$100.00 and expenses furnished by the national organization. When it was announced that this service was available, interest spread, and the chairman directing this project found it necessary to help do the work. The accomplishment very soon fulfilled the requirements in the number and location of local associations, and Virginia was eligible to become a State branch if these units so desired.

Extension Methods

From the first a part time extension secretary has been in the field and some extension work has been done by a few of the local units. These activities, supplemented by the efforts of the president of the State branch and other officers, have enabled the organization to plant one unit in almost every city in the State and to spread the work in more than fifty-six counties. Seven of the cities are so well organized that their work in the various schools is done under the direction of parent-teacher councils, and some counties have county councils of parent-teacher associations.

Vision Kept Before Group

State conventions have been held annually at the time of the State Educational Conference, this courtesy being due to the invitation of J. A. C. Hurt, president of the State Teachers Association, in 1922. On the programs have appeared such speakers as Mrs. Marie Turner Harvey, Dr. J. J. Tigert, Miss Mary McSkimuson, Dr. M. V. O'Shea, and Angelo Patrio, who have kept the highest vision of P. T. A. work before the Virginia branch at the State conventions.

Finance

The organization last year collected only \$500.00 in dues. Donations amounted to \$2,500.00, and the annual appropriation from the State of \$2,000.00 brought the budget up to \$5,000.00. The first appropriation was made at the regular meeting of the State legislature in 1926. Appreciation on the part of the legislators from every section of the State is expressed in the only words attached to the parent-teacher bill—"for the promotion of education in Virginia." This appropriation is disbursed in the same way as the State dues and other funds expended by the State Parent-Teacher Association up to that time.

Parent-Teacher Courses

For four summers the State and National Congress have conducted courses at the University of Virginia in parent-teacher work. For two years these courses have been accredited. Last year fifty-five one-day institutes were given by the field secretary at local units affiliated with the State

association. In connection with the credit courses at the University of Virginia a one week intensive short course in parent-teacher work is held at which lay workers from the local associations are enrolled.

Publicity Helps

The constructive growth of the Virginia Congress of Parents and Teachers has been much augmented by helpful publicity. The State newspapers have been generous with their space and aid. In the beginning, publicity of Roanoke papers helped the idea grow. Last year these same papers covered all sessions of the State convention held in Roanoke.

In the early days, the editor of the largest newspaper in the State gave one page each Sunday to State parent-teacher news. This was carried for more than a year—as long as copy was furnished by the State office. Other newspapers offered the same courtesy. The *Virginia Journal of Education* has, through its editor, since 1923 given one page each month, when copy was furnished by the State office. In 1923, due to the growth and interests of the Virginia movement, the parent-teacher problem shifted from organization to assimilation and education of its membership. More intimate contact from the national through the State and from the State office to local associations has been emphasized, instead of continued State wide publicity and adding local organizations.

Composite Board

The organization plan and the scope of its activities are indicated in the departments assigned to the direction of its seven vice-presidents. The officials include Mrs. Harry Semones, president; Mrs. R. B. Embree, recording secretary; Mrs. N. R. Patrick, corresponding secretary; Miss Eunice Bohannon, treasurer; Mrs. H. H. Covington, first vice-president and aid to the president; Mrs. E. E. Carver, second vice-president and director of the department of organization; Miss Kate Wheeler, third vice-president and director of the department of extension; Mrs. J. W. Stephenson, Jr., fourth vice-president and director of the department of public welfare; Mrs. W. H. Dunn, fifth vice-president and director of the department of education; Mrs. Howard Gordon, sixth vice-president and director of the department of home service; Mrs. Arthur Rowbotham, seventh vice-president and director of the department of health; Mrs. Haywood Brown, historian. On the board are a number of men and women whose occupations are in such varied fields as judge of a city juvenile court, representative of the National Humane Education Association, psychiatrist of children's clinic, a county superintendent of schools, a city superintendent, a school principal, a teacher, a lawyer, a business woman, musicians, dean of education of a State school, and a number of parents as well as citizens who represent none of these mentioned professions, but "who are interested in the cause for which we are organized."

World Contact

The State president is a member of the board of directors of the national organization and has attended all national conventions except one, and many of the meetings of the national directors since the Virginia organization was formed. Enumeration of the accomplishments of the association in the six years of its history in a sketch of this length would be impossible, but it can be stated without a possibility of contradiction that it has made itself felt as a strong factor in the progress and improvement of education and civic conditions in Virginia. It has proved itself of great value as an effective, nonpolitical, supplementary educational agency. It cooperates with the churches and civic agencies, and was in operation in behalf of progress for Virginia before the consolidated Virginia forward movement. By recent formation of an international parent-

teacher organization, the Virginia branch is now placed in touch with the work in all parts of the world.

State Recommends to Locals

The Virginia Congress of Parents and Teachers, at its seventh annual convention, held November 22-25, 1927, at Murphy's Hotel, Richmond, Va., recommended to its local associations that the seven cardinal objectives of education be the basis of its programs and study for the coming year—and possibly for many years. Also a questionnaire sent to the local associations has brought requests from a large number of local associations that this be our uniform program. This is carrying out the 1927 resolutions, which have been adopted by the National Congress of Parents and Teachers assembled in its thirty-first convention in Oakland, Cal., May, 1927. The objectives as stated in the 1927 resolutions are:

1. Worthy Home Membership

The congress calls upon its members, educational workers, and all citizens to support measures for the improvement of family life, including suitable instruction for parenthood, and laws raising the requirements for marriage.

We endorse all worthy projects looking toward better housing, better building codes, better neighborhood playgrounds and parks, and better regional and city planning.

2. Sound Health

The congress favors the development of a program of health education which would guarantee to every child freedom from remediable defects, proper handling from the standpoint of mental health, and the giving of instruction designed to prevent the formation of habits that undermine health and strength.

The congress reaffirms its stand on the Volstead act.

It reaffirms its willingness to cooperate with other organizations in narcotic education.

The congress urges its members to work with publishers of magazines for home use, and demonstrate the pernicious results of advertisements which seek to make the use of tobacco attractive, and deplores the practice of men and women selling their names to forward cigarette advertisements.

3. Vocational Effectiveness

The congress favors a program of vocational guidance and education which will enable all youth to make the most of their talents. It urges State branches to work for the ratification of the proposed child labor amendment, and for better laws within the States that children may be protected from exploitation.

4. Mastery of Tools, Technique, and Spirit of Learning

The congress urges the State branches to support actively worthy movements for the improvement of schools, libraries, museums, art galleries, and other educational agencies.

It urges active work in each congressional district in behalf of the new education bill, creating a department of education with a secretary in the President's cabinet.

We favor methods of selecting State and county superintendents which will secure the highest type of professional leadership in these fields.

The congress expresses the conviction that equal ability in teaching should receive equal compensation regardless of the grade taught.

5. Wise Use of Leisure

The congress favors a positive program of education in the wise use of leisure.

It urges the State branches to work for higher standards of commercial amusements and for a return to the home as a center of recreational life.

The congress reaffirms its stand in behalf of cleaner and better motion pictures, and urges its members to use their influence to promote the use of films offering the best type of family entertainment, as well as those of high educational and cultural value.

The congress further reaffirms its belief that the exploitation of children on the stage for the purposes of exhibition for financial gain is destructive of normal growth and development of children so exploited, and urges its members to use their influence to discourage and prohibit such exploitation.

The National Congress goes on record as opposing dishonest and inaccurate advertising of motion pictures.

6. Useful Citizenship

The congress urges parents and teachers to give children fuller opportunity for the practice of citizenship through participation in clubs and organizations.

We believe that war between nations as a settlement of international disputes is a crime against civilization, and heartily endorse the outlawry of war. We urge our members to work for its adoption.

7. Ethical Character

The congress urges its members to foster spiritual training in order to create an atmosphere in which positive and harmonious character may be developed.

The following are facts gained from a survey of parent-teacher activities in Virginia as a result of the sending out of questionnaires to ten local associations in cities, ten in typical Virginia towns, and ten in rural communities:

I. Type of work:

	City	Town	Rural
Kindergarten	5	---	1
Elementary	8	2	8
Preschool.....	2	2	1
Intermediate and grammar	6	5	1
General community education.....	4	5	5
Problems of high school.....	1	7	3

II. Year organized:

1910.....	1	---	---
1913.....	---	---	---
1915.....	1	---	---
1917.....	1	---	---
1919.....	1	---	---
1920.....	1	2	1
1921.....	2	2	1
1922.....	2	2	1
1923.....	1	1	3
1924.....	---	1	2
1925.....	---	1	2
1926.....	---	1	---

III. Teachers employed (total number)..... 330 170 90

IV. Total in membership with P. T. A..... 164 129 70

V. Number taking Child Welfare Magazine..... 72 51 ...

	City	Town	Rural
VI. Number having these committees:			
Publicity	10	10	7
Membership	10	10	10
Program	10	10	8
Social	8	8	9
School beautifying	7	8	4
Motion picture	4	1	1
Cooperating with other agencies	2	....	2
Extension	3	1	....
Religious education	1	....	1
VII. Reasons for organizing:			
Desire to get more intimate with faculty of school and board of education	7	6	10
Need of better school plant	4	4	8
Need of proper amusements in community	6	2	3
Better paid and more efficient teaching corps	2	2	6
Lack of adequate playground facilities	7	5	7
Health of school children	5	5	6
School attendance	4	2	5
Need to know about courses of study and need of improving them	4	3	1
Encouragement brought to bear from other communities	1	3	5
Pressure of moral conditions in community .....	....	1	1
VIII. Accomplishments:			
Hot lunches	4	3	5
Providing clothes, books and food for children improperly taken care of at home	9	7	7
Established kindergartens	1	....	1
Introduced home economics into school	1	3	3
Getting school nurse	2	2	3
Getting playground director	4	....	....
Introducing new textbooks into school	1	....	1
Giving free medical and dental attention	5	8	6
Piano furnished school	4	3	6
Motion picture machine furnished school	3	6	1
Books, laboratories, and first aid kits furnished school	9	....	9
Playground facilities	4	....	5
Proper kinds of recreation for children in communities	3	1	2
Beautifying interior of school	8	8	5
Beautifying exterior of school	7	7	7
Community library and rest room	4	4	4
Reducing truancy	5	1	1
Encouraging high school graduates to attend college and normal schools	4	3	3
Organizing Scout troops and other junior organizations	2	2	3
Holding baby contests	1	....	1
Attempted to get desirable pictures in movies	6	5	1
Gave parent-teacher pageant	1	....	....
Maintained a community chautauqua	1	3	....
Raised standard of instruction in schools	2	2	5
Raised and supplemented salaries of teachers	1	1	....
Raised standards of parenthood in community	4	7	....
Sex hygiene	1	1	....
Class in study of parent-teacher	1	1	2
Supplied needed school equipment .....	....	7	....
Manual training .....	....	....	1
Agriculture in schools .....	....	....	1
Public health .....	....	....	1
Care and training of children .....	....	....	2
IX. Procedure of meetings:			
Those meeting in afternoon	10	7	10
Those meeting at night .....	....	3	....
(All meetings held monthly.)			
Music by pupils	8	6	5
Teachers participation in program	9	....	7
Read minutes of previous meeting	10	9	10
Community singing	4	4	5
Open discussion taken part in by all	9	7	10
Reading of papers by members	7	6	5
Debate on questions previously announced	1	1	3
Speakers from out of town	6	8	....
Discussions from current magazines	3	....	....
Open forum debates .....	....	1	1
Articles from periodicals .....	....	....	3

		City	Town	Rural
X. Membership:				
1. Efforts to increase:				
Prizes offered to children in rooms having the largest number of parents present at meetings	7	6	5	
Meetings held for everybody.....	10	9	10	
Personal canvass of homes	6	6	7	
Letters of invitation to parents.....	8	6	6	
Members of community calling on parents not attending	6	4	7	
2. Membership campaigns:				
Six held special membership campaigns in cities and eight in small towns.				
3. Total membership	1,366	688	477	
XI. How money is raised:				
Membership dues	10	10	10	
By giving public benefit programs.....	7	8	8	
By giving socials	5	2	10	
(The local membership dues range from 15 cents to \$1.50.)				
XII. Leader factors that prevented the success of these associations:				
Parents' indifference	1	8	6	
Local superintendent's indifference	1	3	1	
Local editor's indifference	1	1	1	
Political factions in community.....	1	1	...	
Lack of leadership .....	...	5	5	
Lack of publicity .....	...	...	...
Church rivalry .....	...	1	...	

APPENDIX I

Tables and Statements

APPENDIX I

TABLE 1

Data regarding certificates held by Virginia teachers (white) in the counties and the cities of the State (1926-27)

GRADE OF CERTIFICATE	COUNTIES		CITIES	
	Number	Percentage	Number	Percentage
Collegiate Professional.....	404	4.1	326	11.3
Collegiate.....	703	7.1	410	14.2
Normal Professional.....	1,499	15.1	1,101	38.1
Special.....	1,150	11.5	502	17.4
Elementary.....	2,668	26.8	436	15.1
First grade.....	2,816	28.3	115	3.9
Provisional First.....	580	5.8	0	0
Second.....	37	.3	0	0
Trade.....	2	.0	0	0
Local Permit.....	86	1.0	0	0

The Collegiate Professional represents graduation from an approved university or college with eighteen semester hours of general professional training and three hours in physical education. The collegiate represents graduation from college with five hours in hygiene and physical education. The special represents two years of college work with six hours in education and two hours in school hygiene or the presumed equivalent of this training in trade experience. The Normal Professional represents the completion of two years in a standard normal school or teachers college; the elementary, one year of such training; the first grade, two-thirds of a year of such training. These standards have been changed somewhat from time to time and some certificates now held have been granted on the basis of examination rather than credential, but the foregoing statements give an approximation of the meaning of the more important certificates.

TABLE 2

Data showing number and percentage of elementary white teachers in Virginia having experience of less than one year, less than two years and less than three years (1926-27).

	COUNTIES		CITIES	
	Number	Percentage	Number	Percentage
Less than one year of experience.....	962	11.9	106	5.2
Less than two years of experience.....	960	11.9	156	7.6
Less than three years of experience.....	954	11.8	168	8.2

TABLE 3

Data regarding the "home teacher" in the rural elementary school (1927-28).

	Median	Full Range	Range of Middle 50 Per Cent
Percentage of teachers now employed who received two years or more of their secondary school training in a high school of the county.....	52.0	0.0-98.0	34.0-67.5
Percentage of unmarried teachers whose home is in the county.....	53.5	0.0-71.6	41.7-71.6
Percentage of unmarried teachers teaching in the school of the district in which her home is located.....	30.7	0.0-86.0	18.5-48.1

TABLE 4

Data regarding rural school supervisors and rural school supervision (1927-28).

	Number of Supervisors Giving this Information	Median	Full Range	Range of Middle 50 Per Cent
1. Number of years of training above high school graduation:				
a. Total.....	29	4.2	1.0- 6.0	3.2- 4.9
b. In normal school.....	29	2.3	0.0- 4.0	1.3- 2.8
c. In college or university.....	29	2.2	0.0- 5.0	1.2- 3.6
2. Number of years of experience (preceding 1927-28) as:				
a. Teacher in:				
(1) Grades 1-7.....	28	5.8	0.0-27.0	3.5- 8.5
(2) Grades 8-11.....	22	2.5	0.0-13.0	1.3- 8.3
(3) Elsewhere.....	14	1.8	0.0-14.0	0.9- 2.9
b. Teacher in:				
(1) Open country school.....	24	3.8	1.0- 8.0	1.5- 5.5
(2) Hamlet or village school.....	22	4.5	0.0-16.0	2.3-10.5
(3) City school.....	19	1.9	0.0-17.0	0.8- 8.7
c. As supervisor.....	27	4.2	0.0-11.0	0.9- 6.8
d. Number of years in present position.....	28	1.7	0.0- 8.0	0.7- 3.5
3. Salary:				
a. Per month.....	29	\$ 182.50	\$ 100-\$ 300	\$ 164-\$ 209
b. Per year.....	29	1,804.30	900- 3,000	1,548- 2,080
4. General information:				
a. Number of buildings supervised.....	24	18.6	1- 56	13.4- 22.5
b. Number of teachers supervised.....	25	47.5	8- 157	32.0- 59.0
c. Number of visits to teachers in 1926-27	24	350.0*	126*-1,040	188.0-465.0
d. Number of individual conferences held.....	25	230.0*	14*- 800	34.0-325.0
e. Number of group conferences held...	26	19.0*	4*- 54	4.0- 23.2

*Of those reporting on this item who were supervising in 1926-27.

TABLE 5

Data regarding members of county boards of education (1927-28)

	Number	Percentage
I. Occupation:		
1. Farmer.....	279	54.8
2. Laborer.....	3	0.6
3. Salesman.....	7	1.4
4. Housewife.....	14	2.7
5. Business man.....	153	30.1
6. Professional man.....	63	10.4
Total reported.....	519	
II. Place of residence:		
1. Open country.....	279	60.5
2. Village under 500 population.....	65	14.1
3. Village 500-4,999 population.....	105	22.7
4. City population 5,000 and over.....	12	2.6
Total reported.....	461	
III. Total length of service as board member:		
1. Less than 1 year.....	32	6.8
2. 1.0- 4.9 years.....	140	29.5
3. 5.0- 9.9 years.....	175	36.9
4. 10.0-14.9 years.....	58	12.3
5. 15.0-19.9 years.....	34	7.2
6. 20.0 years or more.....	35	7.3
Total reported.....	474	
Median length of total service.....		6.9 years
IV. Length of continuous service as board member:		
1. Less than 1 year.....	32	6.8
2. 1.0- 4.9 years.....	144	31.2
3. 5.0- 9.9 years.....	170	36.5
4. 10.0-14.9 years.....	60	12.8
5. 15.0-19.9 years.....	30	6.4
6. 20.0 years or more.....	29	6.3
Total reported.....	465	
Median length of continuous service.....		6.9 years
V. Age of board members:		
1. Under 30 years.....	4	0.8
2. 30.0-39.9 years.....	58	11.9
3. 40.0-49.9 years.....	165	33.9
4. 50.0-59.9 years.....	168	34.6
5. 60.0 years or more.....	91	18.8
Total reported.....	486	
Median age of board members.....		50.9 years
VI. Sex of board members:		
1. Men.....	468	97.1
2. Women.....	14	2.9
Total reported.....	482	

TABLE 6

Number of years of training above high school graduation of county and city superintendents and number of years spent in each type of higher educational institution (1927-28).

	EIGHTY-EIGHT RURAL SUPERINTENDENTS				TWENTY-FOUR CITY SUPERINTENDENTS			
	Median	Full Range	Range of Middle 50 Per Cent	Percent-age Receiving Training	Median	Full Range	Range of Middle 50 Per Cent	Percent-age Receiving Training
Number of years of training above high school graduation.....	4.6	0.2-8.0	3.9-5.3	.....	5.3	0.2-8.0	3.9-5.3	.....
Number of years training received in:								
1. Normal school.....	2.2*	0.2-3.0*	0.5-2.7*	13.6	1.0*	One case only	.....	10.0
2. College.....	4.3	0.5-5.0	3.6-4.8	86.3	4.0	3.0-5.0	.....	65.0
3. University.....	2.1	0.2-5.0	1.4-3.8	32.9	3.2	0.3-7.0	1.0-5.3*	75.0

¹Based upon the data of those having such training.

TABLE 7

Character of professional training of rural and city superintendents (1927-28)

	EIGHTY-EIGHT RURAL SUPERINTENDENTS				TWENTY-FOUR CITY SUPERINTENDENTS			
	Median* (In Semester Hours)	Full* Range (In Semester Hours)	Range* of Middle 50 Per Cent (In Semester Hours)	Percent-age Hav- ing These Courses	Median* (In Semester Hours)	Full* Range (In Semester Hours)	Range* of Middle 50 Per Cent (In Semester Hours)	Percent- age Hav- ing These Courses
Educational psychology.....	7.8	2.0-30.0	6.0-13.0	61.3	10.5	2.0-18.0	6.7-15.6	65.0
General and special methods..	8.4	1.0-36.0	5.3-13.4	54.5	10.5	3.0-20.0	6.5-15.0	60.0
Administration.....	7.8	1.0-38.0	4.4-12.3	59.0	8.5	2.0-38.0	6.5-10.6	65.0

¹Based upon the data of those having such training.

TABLE 8

Age, amount of experience as division superintendent, and tenure of rural and city division superintendents (1927-28)

	EIGHTY-EIGHT RURAL SUPERINTENDENTS			TWENTY-FOUR CITY SUPERINTENDENTS		
	Median	Full Range	Range of Middle 50 Per Cent	Median	Full Range	Range of Middle 50 Per Cent
Age (in years).....	41.8	27.0-78.0	35.6-53.5	47.5	32.0-75.0	37.5-52.5
Total number of years as division superintendent.....	9.0	1.0-41.0	5.0-13.3	7.5	2.0-49.0	4.5-10.5
Number of years in present position.....	8.5	0.2-41.0	4.3-13.1	5.5	2.0-49.0	4.4- 9.5

TABLE 9

Character of experience of rural and city division superintendents previous to accepting present positions (1927-28)

	EIGHTY-EIGHT RURAL SUPERINTENDENTS				TWENTY-FOUR CITY SUPERINTENDENTS			
	Median* (in Years)	Full Range* (in Years)	Range* of Middle 50 Per Cent (in Years)	Percent- age Hav- ing This Experience	Median* (in Years)	Full Range* (in Years)	Range of* Middle 50 Per Cent (in Years)	Percent- age Hav- ing This Experience
a. Teaching in:								
1. Open country school..	2.4	1.0-16.0	1.0-3.6	37.5	3.3	1.0-5.0	2.3-4.2	35.0
2. Village elementary school.....	3.2	1.0-15.0	1.5-3.5	23.2	1.9	1.0-5.0	1.4-2.6	35.0
3. City elementary school.....	2.5	1.0-7.0	1.7-3.9	5.6	4.0	4.0†	.....	15.0
4. High school.....	4.4	1.0-20.0	2.2-8.0	68.1	3.5	1.0-22.0	1.8-5.5	60.0
5. Normal school or college.....	1.5	0.2-15.0	0.8-4.8	13.6	4.5	0.3-10.0	2.5-6.5	40.0
b. Administrative experience as:								
1. Principal of elementary school.....	3.7	1.0-26.0	2.0-6.4	37.5	3.3	1.0-15.5	2.1-5.8	65.0
2. Principal of high school.....	5.0	1.0-26.0	2.5-9.1	76.1	5.5	1.0-18.0	3.3-7.8	85.0
3. Other.....	2.8	1.0-15.0	1.9-4.6	20.4	3.5	1.0-15.0	2.5-5.3	35.0

*Based upon the data from those having such experience.

†Only three cases, each having taught in city elementary schools for four years.

TABLE 10

Type of position held by rural and city superintendents when elected to present position for first time

TYPE OF POSITION	EIGHTY-EIGHT RURAL SUPERINTENDENTS		TWENTY CITY SUPERINTENDENTS	
	Number	Percentage	Number	Percentage
Principal of high school.....	49	55.7	7	35.0
Principal of private school.....	3	3.4	0	0.0
Principal of elementary school.....	3	3.4	2	10.0
Teacher in high school.....	5	5.7	2	10.0
Teacher in private school.....	3	3.4	0	0.0
Division superintendent in another county or city	2	2.3	3	15.0
College instructor.....	1	1.1	0	0.0
Other educational work.....	6	6.8	6	30.0
Clerk of county school board.....	3	3.4	0	0.0
Engineer and contractor.....	1	1.1	0	0.0
Business man.....	4	4.5	0	0.0
Physician.....	2	2.3	0	0.0
Minister.....	1	1.1	0	0.0
Farmer.....	3	3.4	0	0.0
Rural mail carrier.....	1	1.1	0	0.0
Clerk circuit court.....	1	1.1	0	0.0

TABLE 11

Salaries (not counting allowances for travel and office) of rural and city superintendents¹ (1925-26)

SALARY	Rural Superintendents	City Superintendents
Under \$1,000.....	1	...
\$1,000-\$1,999.....	30	...
\$2,000-\$2,999.....	47	3
\$3,000-\$3,999.....	6	6
\$4,000-\$4,999.....	2	3
\$5,000-\$5,999.....	2	7
\$6,000-\$6,999.....	...	0
\$7,000-\$7,999.....	...	1
Total.....	88	20
Median.....	\$2,277	\$4,333
Range of middle 50 per cent.....	\$1,700-\$2,745	\$3,333-\$5,429

¹Data from Bennett, A. L., Selected Aspects of Rural School Administration in Virginia. (Unpublished.)

TABLE 12

Data regarding length of school term in the counties of Virginia (1927-28)

	Median Length of Term of (Days)	Full Range of (days)	Range of Middle 50 Per Cent of (Days)
Average length of term in county.....	168	131-190	159-179
Shortest term in county.....	145	80-190	129-164
Longest term in county.....	180	140-200	....

TABLE 13

Data showing number of pupils and teachers, by size of school, in the elementary and high school grades of 346 schools of four or more teachers (October, 1927)

	GRADES 1-7			GRADES 8-11		
	Median	Full Range	Range of Middle 50 Per Cent	Median	Full Range	Range of Middle 50 Per Cent
Number of pupils:						
1. Elementary grades:						
a. 4-5 teachers.....	129	73-192	105-156			
b. 6 or more teachers.....	306	166-490	189-373			
2. Elementary and high school grades:						
a. 4-5 teachers.....	89	36-148	77-111	17	8-147	12- 24
b. 6-10 teachers.....	134	41-322	108-168	56	10-170	44- 70
c. 11-15 teachers.....	234	97-418	188-285	85	41-170	68-111
d. 16 or more teachers.....	434	279-1080	379-583	166	75-876	117-223
Number of teachers:						
1. Elementary grades:						
a. 4-5 teachers.....	*					
b. 6 or more teachers.....	8.0	6-16	7.2- 9.7			
2. Elementary and high school grades:						
a. 4-5 teachers.....	3.6	2- 4	3.2- 3.9	1.8	1- 4	1.4-2.3
b. 6-10 teachers.....	4.7	3- 7	4.2- 5.8	3.7	1- 6	3.3-4.2
c. 11-15 teachers.....	7.8	4-11	7.2- 8.6	5.5	3- 7	4.7-6.2
d. 16 or more teachers.....	13.5	9-30	11.4-16.3	7.3	3-33	6.1-9.0

*62 per cent had four teachers; 38 per cent, five teachers.

TABLE 14

Data regarding age and tenure of principals of 346 schools of four or more teachers (October, 1927)

	Median	Full Range	Range of Middle 50 Per Cent
Age of principal:			
1. Elementary grades:			
a. 4-5 teachers.....	32.0	20-56	28.0-38.0
b. 6 or more teachers.....	42.0	22-68	29.0-48.5
2. Elementary and high school grades:			
a. 4-5 teachers.....	26.0	19-53	22.8-32.8
b. 6-10 teachers.....	30.0	21-66	26.4-35.0
c. 11-15 teachers.....	33.0	23-68	29.0-39.0
d. 16 or more teachers.....	34.2	24-61	31.3-39.2
Number years in present position:			
1. Elementary grades:			
a. 4-5 teachers.....	2.5	0-11	1.7- 4.3
b. 6 or more teachers.....	3.7	1-24	2.8- 6.5
2. Elementary and high school grades:			
a. 4-5 teachers.....	2.0	0-16	0.4- 2.8
b. 6-10 teachers.....	2.7	0-22	1.7- 4.6
c. 11-15 teachers.....	2.9	0-19	2.6- 5.3
d. 16 or more teachers.....	3.7	0-30	1.9- 4.5

TABLE 15

Data regarding experience of principals of 346 schools of four or more teachers in grades 1 to 7; grades 8 to 11; and as principal (October, 1927)

	Median (Years)			Full Range (Years)			Range of Middle 50 per cent (Years)		
	Grades 1-7	Grades 8-11	As prin- cipal	Grades 1-7	Grades 8-11	As prin- cipal	Grades 1-7	Grades 8-11	As prin- cipal
Experience of principals:									
1. Elementary grades:									
a. 4-5 teachers.....	8.5	1.0	3.8	0-32	0- 8	0-16	4.5-14.0	0.5-2.5	2.4- 6.5
b. 6 or more teachers.....	8.1	0.9	5.3	1-49	0-21	0-49	5.6-11.8	0.5-6.0	3.0- 9.6
2. Elementary and high school grades:									
a. 4-5 teachers.....	1.1	1.5	2.0	0-19	0-23	0-23	0.5- 5.6	1.0-4.8	0.8- 4.5
b. 6-10 teachers.....	0.8	3.8	4.6	0-20	0-47	0-47	0.4- 2.0	1.9-7.5	2.4- 8.4
c. 11-15 teachers.....	0.8	4.7	6.9	0-13	0-35	0-36	0.4- 1.5	2.0-8.3	3.2-10.4
d. 16 or more teachers.....	0.8	4.8	6.6	0- 8	0-28	0-30	0.4- 1.7	1.5-7.4	4.8- 9.6

TABLE 18

Data showing percentage of school day of principals of 346 schools of four or more teachers devoted to teaching, etc., supervision, etc., clerical work and administration (October, 1927).

	Teaching, Etc.	Supervision, Etc.	Clerical Work	Administra- tion
Median:				
1. Elementary grades:				
a. 4-5 teachers.....	80.5*	10.7*	5.2*	12.0*
b. 6 or more teachers.....	68.0	13.0	8.2	12.5
2. Elementary and high school grades:				
a. 4-5 teachers.....	76.5	10.6	5.3	12.4
b. 6-10 teachers.....	54.0	22.3	10.6	17.2
c. 11-15 teachers.....	35.0	32.0	14.5	22.0
d. 16 or more teachers.....	21.5	41.3	14.0	23.5
Full range:				
1. Elementary grades:				
a. 4-5 teachers.....	15-100	0-35	0-25	0-25
b. 6 or more teachers.....	0-85	3-40	0-30	0-30
2. Elementary and high school grades:				
a. 4-5 teachers.....	40-100	0-25	0-24	0-31
b. 6-10 teachers.....	15-85	0-50	0-37	0-35
c. 11-15 teachers.....	0-65	12-80	0-37	5-37
d. 16 or more teachers.....	0-60	20-63	0-50	0-56
Range of middle 50 per cent:				
1. Elementary grades:				
a. 4-5 teachers.....	70.6-88.0	6.5-14.0	2.3-6.0	7.3-16.2
b. 6 or more teachers.....	62.0-75.5	10.5-21.5	4.7-12.0	9.8-16.0
2. Elementary and high school grades:				
a. 4-5 teachers.....	64.0-85.4	6.0-15.6	2.6-11.0	7.4-18.8
b. 6-10 teachers.....	46.0-65.0	17.0-28.0	6.7-14.0	11.6-24.0
c. 11-15 teachers.....	27.0-48.0	24.0-38.0	10.0-21.0	13.5-28.0
d. 16 or more teachers.....	14.7-34.0	31.4-50.8	9.0-24.0	15.5-33.0

*Since these are median percentages the total for all four groups does not necessarily equal 100 per cent.

TABLE 19

Data showing frequency with which certain duties were performed by the principal alone, by the superintendent alone, and by the two together in 346 schools of four or more teachers.

	PERCENTAGE PERFORMED BY		
	Principal	Division Superintendent	Principal and Superintendent
a. Nominating teachers:			
1. Elementary grades:			
a. 4-5 teachers.....	3.0	54.6	42.4
b. 6 or more teachers.....	0.0	47.6	52.4
2. Elementary and high school grades:			
a. 4-5 teachers.....	0.0	96.0	4.0
b. 6-10 teachers.....	2.8	56.0	41.2
c. 11-15 teachers.....	1.8	43.6	54.6
d. 16 or more teachers.....	9.6	40.0	50.4
b. Assigning teachers to particular work in the school:			
1. Elementary grades:			
a. 4-5 teachers.....	15.1	36.4	48.5
b. 6 or more teachers.....	25.0	16.7	58.3
2. Elementary and high school grades:			
a. 4-5 teachers.....	16.0	60.0	24.0
b. 6-10 teachers.....	39.0	23.0	38.0
c. 11-15 teachers.....	30.0	33.9	36.1
d. 16 or more teachers.....	48.2	10.3	41.5
c. Determining teacher's salary:			
1. Elementary grades:			
a. 4-5 teachers.....	0.0	100.0	0.0
b. 6 or more teachers.....	0.0	100.0	0.0
2. Elementary and high school grades:			
a. 4-5 teachers.....	0.0	100.0	0.0
b. 6-10 teachers.....	0.0	97.7	2.3
c. 11-15 teachers.....	1.8	94.7	3.5
d. 16 or more teachers.....	0.0	88.0	12.0
d. Preparing the budget for the school:			
1. Elementary grades:			
a. 4-5 teachers.....	3.5	93.0	3.5
b. 6 or more teachers.....	5.5	89.0	5.5
2. Elementary and high school grades:			
a. 4-5 teachers.....	0.0	93.5	6.5
b. 6-10 teachers.....	5.1	90.0	4.9
c. 11-15 teachers.....	1.7	94.8	3.5
d. 16 or more teachers.....	0.0	85.2	14.8
e. Choosing books for school library:			
1. Elementary grades:			
a. 4-5 teachers.....	78.2	6.2	15.6
b. 6 or more teachers.....	85.7	0.0	14.3
2. Elementary and high school grades:			
a. 4-5 teachers.....	88.0	4.0	8.0
b. 6-10 teachers.....	86.9	3.8	9.3
c. 11-15 teachers.....	91.0	3.5	5.5
d. 16 or more teachers.....	90.0	3.5	6.5
lecting equipment:			
Elementary grades:			
a. 4-5 teachers.....	20.0	26.0	54.0
b. 6 or more teachers.....	39.2	26.0	34.8
2. Elementary and high school grades:			
a. 4-5 teachers.....	62.0	20.0	18.0
b. 6-10 teachers.....	59.8	9.2	31.0
c. 11-15 teachers.....	45.0	19.0	36.0
d. 16 or more teachers.....	42.0	19.3	38.7
g. Selecting supplies:			
1. Elementary grades:			
a. 4-5 teachers.....	37.0	28.6	34.4
b. 6 or more teachers.....	50.0	41.0	9.0
2. Elementary and high school grades:			
a. 4-5 teachers.....	59.7	21.1	19.2
b. 6-10 teachers.....	58.2	8.5	33.3
c. 11-15 teachers.....	40.0	29.3	30.7
d. 16 or more teachers.....	52.0	22.2	25.8
f. Controlling pupils in cases of ordinary discipline:			
1. Elementary grades:			
a. 4-5 teachers.....	94.0	0.0	6.0
b. 6 or more teachers.....	100.0	0.0	0.0

TABLE 19 CONTINUED

	PERCENTAGE PERFORMED BY		
	Principal	Division Superintendent	Principal and Superintendent
2. Elementary and high school grades:			
a. 4-5 teachers.....	100.0	0.0	0.0
b. 6-10 teachers.....	98.6	0.0	1.4
c. 11-15 teachers.....	100.0	0.0	0.0
d. 16 or more teachers.....	100.0	0.0	0.0
i. Controlling pupils in cases involving suspension or expulsion:			
1. Elementary grades:			
a. 4-5 teachers.....	3.0	12.1	84.9
b. 6 or more teachers.....	4.5	22.5	73.0
2. Elementary and high school grades:			
a. 4-5 teachers.....	32.0	14.0	54.0
b. 6-10 teachers.....	21.8	8.5	69.7
c. 11-15 teachers.....	24.5	9.8	65.7
d. 16 or more teachers.....	40.6	15.6	43.8
Dealing with school league:			
1. Elementary grades:			
a. 4-5 teachers.....	94.0	0.0	6.0
b. 6 or more teachers.....	95.5	4.5	0.0
2. Elementary and high school grades:			
a. 4-5 teachers.....	94.0	2.0	4.0
b. 6-10 teachers.....	87.8	2.6	9.6
c. 11-15 teachers.....	83.9	5.3	10.8
d. 16 or more teachers.....	80.0	3.5	16.5
k. Dealing with other community groups and with patrons:			
1. Elementary grades:			
a. 4-5 teachers.....	81.2	3.0	15.8
b. 6 or more teachers.....	86.3	9.0	4.7
2. Elementary and high school grades:			
a. 4-5 teachers.....	80.0	2.0	18.0
b. 6-10 teachers.....	75.0	2.6	22.4
c. 11-15 teachers.....	67.8	5.0	27.2
d. 16 or more teachers.....	53.1	9.3	37.6
l. Supervision of instruction:			
1. Elementary grades:			
a. 4-5 teachers.....	27.2	18.3	54.5
b. 6 or more teachers.....	41.6	4.0	54.4
2. Elementary and high school grades:			
a. 4-5 teachers.....	52.9	11.7	35.4
b. 6-10 teachers.....	54.1	5.8	40.1
c. 11-15 teachers.....	47.5	6.5	46.0
d. 16 or more teachers.....	56.2	3.0	40.8

TABLE 20

Data regarding leadership activities of rural superintendents (1926-27)

	Median	Full Range	Range of Middle 50 Per Cent
1. Number of public meetings addressed for the purpose of informing citizens regarding school questions.....	14.4	1-149	9.0-23.6
2. Percentage of schools having a parent-teacher association or a unit of the Virginia Cooperative Education Association giving considerable attention to school needs.....	69.4	8-100	45.0-95.8
3. Number of times newspapers were used for school publicity.....	13.4	1-200	7.0-26.9
4. Number of county or local school fairs held.....	1.7	0-12	1.2-2.5
5. Number of county or local field days held.....	1.6	0-25	1.1-2.2
6. Number of different circular letters (to parents or other citizens) sent out.....	3.6	0-40	1.2-6.5

TABLE 21

Showing the age-grade distribution of all white children in the city elementary schools.

Grades	1	2	3	4	5	6	7	8
Age								
Under 7	7,141	1,010	37					
7	2,868	4,178	877	43				
8	1,002	2,500	3,615	954	50			
9	382	1,067	2,451	3,143	890	50	2	
10	164	407	1,160	2,272	2,916	832	77	2
11	75	186	557	1,354	2,567	2,557	855	102
12	60	138	381	861	1,641	2,215	1,049	754
13	25	46	155	439	996	1,675	2,222	1,793
14		25	61	192	478	873	1,339	1,793
15			25	76	184	425	667	1,346
16			10	16	37	113	262	720
17				5	19	15	74	225
18				2	2	5	8	66
19							1	13
Over 19								8
Totals	11,717	9,557	9,329	9,357	9,780	8,760	7,156	6,827
Med. Age in Yrs.	6.44	7.90	8.06	9.24	10.40	11.42	12.45	13.42

TABLE 22

Showing the number of years under age and over age of each pupil who is not of normal age in the city elementary schools

TABLE 23

Showing the average number of minutes per week and the percentages of elementary school time for all subjects and regular school activities

SUBJECTS AND ACTIVITIES	Average Number Minutes Per Week	Percentage of Total Time
Opening exercises.....	442	4.3
Reading.....	1,682	16.4
Arithmetic.....	1,265	12.4
Language.....	1,045	10.2
Physical education.....	633	6.2
Geography.....	693	6.8
History and civics.....	601	5.9
Drawing and art.....	368	3.6
Spelling.....	574	5.6
Music.....	4,425	4.0
Penmanship.....	506	4.9
Industrial arts.....	123	1.2
Nature study or science.....	359	3.5
Miscellaneous.....	598	9.1
Recess.....	927	5.8

TABLE 24

Showing the distance each high school is from its nearest neighboring high school

MILES	Number of Schools	MILES	Number of Schools
½.....	1	11.....	4
1¼.....	1	12.....	11
2.....	7	13.....	1
3.....	10	14.....	6
4.....	7	15.....	2
5.....	13	16.....	1
6.....	26	17.....	1
7.....	25	18.....	4
8.....	18	20.....	4
9.....	8	22.....	1
10.....	23	25.....	1

TABLE 25

Enrollment by grades in Virginia and in the entire United States in 1923-1924

YEAR OR GRADE	Total Enrollment in Virginia Schools*	Percentage of Enrollment in Virginia	Percentage of Enrollment in Entire United States
1st year.....	21,381	42.9	36.9
2nd year.....	13,613	27.4	27.4
3rd year.....	9,030	18.1	20.0
4th year.....	5,743	11.5	15.7

*Taken from statistics of State school systems, 1923-1924, United States Bureau of Education Bulletin, 1925, No. 42, Table 29, p. 39.

†Taken from statistics of public high schools, 1923-1924, United States Bureau of Education Bulletin, 1925, No. 40, Table 2, p. 5.

TABLE 26

	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Total
No. promoted.....	13,575	10,032	8,186	6,681	895	39,369
No. failed.....	3,604	2,193	1,622	700	112	8,231
No. dropped.....	3,104	1,813	1,187	691	118	6,919
Total.....	20,283	14,038	10,995	8,072	1,125	54,513

TABLE 27

Showing school census and enrollment in school by ages (whites only)

AGE	15	16	17	18	19	Total
School census.....	34,490	36,558	32,422	31,371	27,526	162,367
Enrolled in school.....	26,439	19,059	11,792	6,184	2,433	65,907
Per cent of youths in school.....	76.6	52.1	36.4	19.7	8.8	40.6

TABLE 28

The after record of 34 eighth grade pupils in the year 1925

	No. of Pupils
Now in school as seniors.....	14
Graduated last year (accelerated).....	5
At home working.....	6
In private school.....	1
Moved out of town.....	5
"Just loafing"	3
Total.....	34

TABLE 29

The after record of 98 eighth grade pupils who graduated in 1927

	No. of Pupils
Moved out of town.....	7
In private school.....	3
At home or at work.....	9
In school now.....	63
"Just loafing"	8
Out of school but interests unknown.....	8
Total.....	98

TABLE 30
Sources of supply of high school teachers, 1926-1927

	In 4 Year High Schools	In Junior High Schools	Total
1 Out of State institutions.....	703	65	768
2 Virginia State teachers colleges (four).....	419	74	493
3 State University of Virginia.....	348	39	387
4 College of William and Mary.....	302	54	356
5 Randolph-Macon Woman's College.....	167	26	193
6 No. collegiate training.....	152	32	184
7 Westhampton College.....	117	25	142
8 Virginia Polytechnic Institute.....	116	4	120
9 Roanoke College.....	62	9	71
10 Emory and Henry College.....	68	1	69
11 Richmond College.....	66	1	67
12 Lynchburg College.....	61	1	62
13 Bridgewater College.....	53	0	53
14 Randolph-Macon College.....	43	1	44
15 Hollins College.....	36	4	40
16 All other institutions.....	332	27	359

TABLE 31
(A Summarizing Table)
SOURCES OF SUPPLY OF HIGH SCHOOL TEACHERS¹
Standard Four Year High Schools

	Teachers	Per cent
State institutions	1,211	39.8
Private institutions	946	31.0
City normals	15	0.5
Out-of-State institutions	721	23.7
No collegiate training ¹	152	5.0
<i>Junior High Schools</i>		
State institutions	175	47.7
Private institutions	84	23.1
City normals	7	2.0
Out of State institutions	67	18.4
No collegiate training ²	32	8.8
<i>Totals</i>		
State institutions	1,384	40.6
Private institutions	1,030	30.2
City normals	22	.7
Out of State institutions	788	23.1
No collegiate training ²	184	5.4

¹Where a teacher has attended more than one college he is listed under each college.

²These include teachers of commercial branches, trades, industries, music and other nonacademic subjects.

TABLE 32
Range of salaries for principals of accredited four-year high schools in cities and counties combined

SALARY	No. Principals Receiving
Under \$1,200.....	8
From \$1,200 to \$1,499.....	80
From \$1,500 to \$1,999.....	156
From \$2,000 to \$2,499.....	79
From \$2,500 to \$2,999.....	29
Over \$3,000.....	18
Not reporting.....	7
Total.....	377

TABLE 33

Present location of the graduates of the University of Virginia

	1923	1924	1925	1926	1927	Total
Doctors of Medicine:						
Virginia.....	11	9	20	24	13	77
Other States.....	16	21	33	21	29	120
Bachelors of Laws:						
Virginia.....	37	26	22	23	35	143
Other States.....	34	43	27	29	23	156
Chemical Engineers:						
Virginia.....	2	.....	.....	.....	2	4
Other States.....	5	6	1	1	.....	13
Civil Engineers:						
Virginia.....	2	6	1	9	1	19
Other States.....	4	4	2	9	.....	19
Electrical Engineers:						
Virginia.....	2	.....	2	4	2	10
Other States.....	6	12	2	7	.....	27
Mechanical Engineers:						
Virginia.....	3	3	1	2	.....	9
Other States.....	2	6	2	1	.....	11
Bachelors of Science in Education:						
Virginia.....	4	5	24	12	22	67
Other States.....	2	5	7	6	3	23
Bachelors of Science in Architecture:						
Virginia.....	2	.....	1	1	3	7
Other States.....	1	1	3	2	2	9
Bachelors of Science in Chemistry:						
Virginia.....	2	2	2	1	1	8
Other States.....	1	3	3	.....	.....	7
Bachelors of Science in Commerce:						
Virginia.....	2	6	11	8	6	33
Other States.....	6	8	7	5	11	37
Bachelors of Science in Mathematics:						
Virginia.....	.....	.....	1	.....	.....	2
Other States.....	1	.....	.....	.....	.....	.....
Bachelors of Science in Medicine:						
Virginia.....	1	1	.....	1	.....	3
Other States.....	3	1	3	4	.....	11
Bachelors of Science in Physics:						
Virginia.....	1	.....	.....	.....	.....	1
Bachelors of Science:						
Virginia.....	14	19	11	17	33	94
Other States.....	37	31	40	39	16	163
Bachelors of Arts:						
Virginia.....	7	5	2	4	22	40
Other States.....	25	17	19	14	12	87
Masters of Science in Chemistry:						
Virginia.....	1	.....	.....	.....	.....	1
Other States.....	5	.....	.....	.....	.....	5
Masters of Science:						
Virginia.....	5	4	8	7	13	37
Other States.....	8	20	12	9	1	50
Masters of Arts:						
Virginia.....	12	11	16	16	25	80
Other States.....	9	18	23	12	8	70
Doctors of Philosophy:						
Virginia.....	3	3	6	5	5	22
Other States.....	3	2	3	3	5	16
Bachelors of Science in Engineering:						
Virginia.....	.....	.....	.....	.....	7	7
Other States.....	.....	.....	.....	.....	7	7

TABLE 34
Present location of graduates of the Virginia Polytechnic Institute

	1923	1924	1925	1926	Total
Agricultural Education:					
Virginia.....	8	11	5	13	37
Other States.....	1	1	1	2	5
Agricultural Engineering:					
Virginia.....		7	8	2	17
Other States.....		2	4	2	8
Agronomy:					
Virginia.....	5	1	5	7	18
Other States.....	1	1	2	4	8
Animal Husbandry:					
Virginia.....	5	5	3	5	18
Other States.....	2		1		3
Dairy Husbandry:					
Virginia.....	3	1	2	3	9
Other States.....	1	1	1	3	6
Horticulture:					
Virginia.....	2	2	4	4	12
Other States.....	1	1	2	1	5
Chemical Engineering:					
Virginia.....	2	3	2	1	8
Other States.....	1	3	5	2	11
Civil Engineering:					
Virginia.....	12	4	9	1	26
Other States.....	3	3	9	3	18
Commercial Engineering:					
Virginia.....	5	2	6	7	20
Other States.....		4	1	6	11
Electrical Engineering:					
Virginia.....	11	6	10	12	39
Other States.....	21	15	20	17	73
Industrial Education:					
Virginia.....	4	5	2	1	12
Other States.....	3	2	2	1	8
Mechanical Engineering:					
Virginia.....	8	6	3	8	25
Other States.....	5	7	11	10	33
Mining Engineering:					
Virginia.....		2	1		3
Other States.....	1	3	5	1	10
Biology:					
Virginia.....	2		2	2	6
Other States.....			3		3
Chemistry:					
Virginia.....	1	2	2	2	7
Other States.....		1	2		3
Metallurgy:					
Virginia.....			1	1	2
Other States.....			1		1
Geology:					
Virginia.....	1	1	1		3
Other States.....					

TABLE 35

Present location and occupation of graduates of the Virginia Military Institute

OCCUPATION	1923		1924		1925		1926		1927		5 yr. Total	
	In Va.	Elsewhere	In Va.	Elsewhere								
Actor.....						1						1
Architect.....		1										1
Army officer.....	2	1	1	1						1	3	3
Automobiles.....		2	1		1						2	2
Banking.....		3	1	2		1		1			1	7
Civil engineer, contractor, builder, etc.....	2	2	6	8	7		6		1	5	19	33
Cleaning (dry).....		7	1	1		1					1	
Cotton.....		1								2		3
Drugs.....												2
Electrical engineer.....	3	4	4	2		1					10	
Farmer.....		5	4	1	2		2		7		1	20
Florist.....				1								1
Insurance.....	2	1	1	1	8		1	3			5	13
Journalism.....			1	1				1			2	1
Lawyer.....	1		1			2					2	5
Lumber.....	2			1							2	
Marine corps.....	1	4		1	1						6	5
Merchant.....		1	1	2	1	1		2	1	2	3	12
Manufacturing.....	3	5	1	2	3		4		2		4	16
Orchardist.....									1			1
Planter.....				1								1
Petroleum.....		1				1						2
Pharmacist.....			1									1
Playbroker.....									1			1
Public utilities.....	2						1		4		7	
Railroad.....		1	2	6	3		3		2	2	10	
Real estate.....		1		6	1		1			1	3	11
Restaurateur.....		1				1						1
Salesman.....	1	2	2		5		4		5		3	18
Sculptor.....			1									1
Steel.....			1									1
Student.....	1	3	10	19		4		3	19		11	63
(post-graduate)												
Teaching.....	6	6	8	3		4		6		2	30	6
Telephone.....		3	2	1		1		2		1	5	8
Underwriter.....	2		1	4				2			2	
(engineers)												5
Unknown or not definitely known.....	12	8	4	10	5	6	6	8	15	44	39	
Dead.....	2			1							3	
Total.....	45	55	42	53	41	63	27	48	27	68	182	287

Army and marine corps officers classified by legal residence. Students classified by location of college or university in which post-graduate work is being taken.

TABLE 36

Total student credit hours of instruction, salary budgets and salary cost per student year credit hour (*i. e.*, the cost per student semester credit hour multiplied by 2, and the cost per student quarter credit hour multiplied by 3).

DEPARTMENT	Student Quarter Credit Hours	Total Salary Costs	Salary Cost per Student Year Credit Hour
SECTION 1—THE UNIVERSITY OF VIRGINIA			
Fine arts (excluding music).....	1,994	\$ 7,628.51	\$ 11.46
Music.....	1,455	6,168.64	12.72
Astronomy.....	108	11,761.45	326.70
Biblical history and literature.....	978	4,749.93	14.57
Biology.....	4,602	16,063.11	10.47
Chemistry.....	6,734	26,925.31	11.99
Commerce.....	4,527	14,812.27	9.81
Economics.....	1,878	11,269.73	18.00
Education.....	1,382	17,392.95	37.76
English.....	5,349	10,964.42	6.15
English literature.....	2,820	15,124.71	16.09
Forestry.....	132	1,250.10	28.41
Geology.....	2,010	11,770.75	17.57
Germanic languages.....	798	6,249.96	23.50
Greek.....	570	5,629.93	29.63
History.....	3,072	12,204.01	11.92
Latin.....	693	6,489.51	28.09
Mathematics.....	2,619	21,449.38	24.57
Philosophy and psychology.....	5,286	13,598.49	7.72
Physical education.....	2,964	11,916.97	8.04
Physics.....	1,646	15,395.44	28.06
Political science.....	2,016	7,251.47	10.79
Public speaking.....	486	1,579.95	9.75
Romance languages.....	5,285	22,722.41	12.89
Sociology.....	510	4,762.47	28.01
Total academic.....	59,914	\$ 285,130.92	\$ 14.28
<i>Department of Engineering</i>			
Civil.....	163½	\$ 10,713.71	\$ 196.56
Mechanical.....	234	6,275.12	80.43
Electrical.....	269½	9,389.66	104.52
Chemical.....	992	2,915.78	8.82
Total Engineering.....	1,659	\$ 29,294.27	\$ 53.00
SECTION 2—VIRGINIA POLYTECHNIC INSTITUTE			
Agricultural chemistry.....	99	\$ 1,025.00	\$ 31.06
Agricultural economics.....	224	1,280.00	17.14
Agricultural education.....	289	7,846.66	81.45
Agricultural engineering.....	587	4,700.00	24.02
Agronomy.....	524	3,095.00	17.15
Animal husbandry.....	412	4,620.00	33.64
App. mechanics and experimental engineering.....	2,951	12,050.00	12.25
Botany and plant pathology.....	833	3,565.00	12.84
Business administration.....	3,839	7,200.00	5.63
Chemistry.....	4,854	13,310.00	8.22
Civil engineering.....	1,860	8,291.66	13.37
Dairy husbandry.....	317	3,100.00	29.34
Economics and history.....	4,792	5,900.00	3.69
Education.....	850	833.33	2.94
Electrical engineering.....	2,679	9,370.00	10.49
English.....	5,747	14,300.00	7.46
Foreign languages.....	726	3,400.00	14.05
Geology.....	788	3,800.00	14.47
Graphics and mechanism.....	2,631	9,400.00	10.72
Home economics.....	214	2,505.00	35.13
Horticulture.....	464	5,116.66	33.08
Mathematics.....	7,617	16,060.00	6.32
Mechanic arts.....	1,875	11,000.00	17.60
Metallurgy and metallography.....	330	3,600.00	32.73
Mining engineering.....	233	3,300.00	42.49
Physical education.....	640	5,250.00	24.61
Physics.....	2,770	10,700.00	11.59
Poultry husbandry.....	65	1,066.66	49.23
Power engineering and machine design.....	447	3,600.00	24.16
Zoology and animal pathology.....	964	6,780.00	21.10
Total.....	50,621	\$ 186,064.97	\$ 11.03

TABLE 36—CONTINUED

DEPARTMENT	Student Semester Credit Hours	Total Salary Costs	Salary Cost per Student Year Credit Hour
SECTION 3—WILLIAM AND MARY			
Ancient languages.....	942	\$ 6,400.00	\$ 13.59
Art.....	540	3,739.00	13.85
Biblical literature.....	354	1,800.00	10.17
Biology.....	2,284	8,934.00	7.82
Business administration.....	1,629	16,957.50	20.82
Chemistry.....	3,130	7,700.00	4.92
Education.....	1,689	23,143.68	27.40
English and journalism.....	4,513	18,489.00	8.19
Government and citizenship, jurisprudence, including sociology.....	1,975	12,400.00	12.55
History.....	2,040	10,600.00	10.39
Mathematics and industrial arts.....	2,515	10,004.00	7.75
Modern languages.....	2,688	10,411.15	7.75
Music.....	308	2,325.00	15.10
Physical education.....	1,317	12,139.00	18.43
Physics.....	959	5,550.00	11.56
Psychology and philosophy.....	1,161	7,025.00	12.10
Home economics.....	626	7,080.00	22.62
Total.....	28,670	\$ 164,697.33	\$ 11.49
SECTION 4—VIRGINIA MILITARY INSTITUTE			
Mathematics.....	4,538	\$16,530.00	\$7.28
English and literature.....	3,353	13,165.00	7.85
History.....	2,012	8,515.00	8.46
Latin.....	156	2,365.00	30.32
German.....	657	4,850.00	14.76
French and spanish.....	3,594	14,315.00	7.97
Military science (supported by U. S. government)			
Physical education.....	3,472	2,300.00	1.32
Civil engineering.....	1,870	11,815.00	12.64
Economics and political science.....	915	5,500.00	12.02
Mineralogy and geology.....	332	3,765.00	22.68
Mechanics and drawing.....	1,848	7,315.00	7.92
Chemistry.....	2,107	10,415.00	9.87
Physics.....	2,032	8,665.00	8.53
Electrical engineering.....	1,682	8,315.00	9.89
Biology.....	192	1,965.00	3.71
Psychology and philosophy.....	548	3,565.00	13.01
Total.....	29,308	\$ 123,360.00	\$ 8.42

TABLE 37

Distribution of classes according to enrollment for year 1926-27

NUMBER OF STUDENTS ENROLLED	University	V. P. I.	W. & M.	V. M. I.	Med. Col.
1 to 5.....	206	88	65	.....	4
6 to 10.....	108	69	88	6	21
11 to 15.....	63	47	64	10	14
16 to 20.....	27	43	20	.....	12
21 to 25.....	25	30	16	17	8
26 to 30.....	16	21	16	21	13
31 to 40.....	52	38	18	18	14
41 to 50.....	30	30	8	4	9
51 to 75.....	54	36	19	12	3
76 to 100.....	21	28	11	13	31
101 or more.....	68	47	24	28	2
Median.....	12	19	12	36	27
25 percentile.....	5	8	7	25	13
75 percentile.....	41	47	28	90	60

TABLE 38

Distribution of classes according to percentages of students who failed to complete the course with passing mark at the end of the term. Data are for year 1926-27

PERCENTAGE OF FAILURES	University	V. P. I.	W. & M.	V. M. I.	Med. Col.
0.....	147	252	166	28	33
1 to 5.....	32	57	16	19	17
6 to 10.....	44	38	44	13	15
11 to 15.....	38	37	36	6	19
16 to 20.....	45	24	21	7	12
21 to 25.....	18	19	19	5	4
26 to 30.....	13	19	12	1	9
31 to 35.....	11	8	8	2	5
36 to 40.....	6	6	3	1	4
41 to 50.....	8	7	4	.....	6
51 or more.....	3	1	1	2	1
Median.....	6	.....	.....	5	10
25 percentile.....	.....	.....	.....	.....	.....
75 percentile.....	19	11	16	13	19

TABLE 39

Distribution of teaching staffs, according to the number of periods per week of teaching (one hour of laboratory teaching being counted as .6 hour) during the spring term, 1926-27, disregarding the fact that certain members of the teaching staff perform other duties than instruction.

PERIODS PER WEEK OF TEACHING	University	V. P. I.	W. & M.	V. M. I.
0.....	5	.....	.....	1
1.....	.....	.....	.....	.....
2.....	3	4	5	.....
3.....	5	5	5	.....
4.....	2	4	.....	.....
5.....	1	1	2	.....
6.....	7	3	.....	.....
7.....	2	3	.....	2
8.....	2	2	2	.....
9.....	25	5	3	3
10.....	7	5	.....	.....
11.....	2	2	5	4
12.....	14	3	7	1
13.....	8	11	2	.....
14.....	5	6	1	1
15.....	5	7	14	.....
16.....	2	5	2	2
17.....	.....	2	5	1
18.....	4	2	11	16
19.....	.....	4	.....	4
20.....	.....	2	.....	13
21.....	1	.....	3	.....
22.....	.....	2	.....	2
23.....	.....	.....	.....	4
24.....	.....	.....	.....	.....
25.....	.....	.....	.....	.....
Above.....	2	4	1	.....
Median.....	10	13	15	18

TABLE 40

Distribution of rooms used for lecture, discussion and laboratory purposes, according to the number of periods per week scheduled for use during the second term, 1926-1927.

A. LECTURE AND CLASSROOMS

PERIODS SCHEDULED	University	V. P. I.	W. & M.	V. M. I.	Med. Col.
0-10.....	2	14	7	1	2
11-15.....	5	16	3	3	3
16-20.....	6	8	6		1
21-25.....	14	5			3
26-30.....	13	3	8	20	
31 or more.....	4		2	4	

B. LABORATORY ROOMS

0-10.....	2	11	2	13	5
11-15.....	11	7	5		5
16-20.....	4	11	1		2
21-25.....		5	2		2
26-30.....	2	1			1
31 or more.....	25				1

TABLE 41

Total scores made by freshmen in the American Council Psychological Education, 1927 edition.

SCORE INTERVAL	U. of Va.	V. P. I.	NUMBER CASES		
			W. & M.		V. M. I.
			Boys	Girls	
0- 9.....			1	1	
10- 19.....	2	2	1		
20- 29.....	3	4	5		
30- 39.....	3	14	8	2	
40- 49.....	9	15	8	7	
50- 59.....	9	22	9	9	6
60- 69.....	10	38	25	8	11
70- 79.....	14	42	17	13	3
80- 89.....	19	33	21	14	15
90- 99.....	29	36	25	15	15
100-109.....	21	36	18	17	
110-119.....	42	39	22	19	16
120-129.....	40	24	14	8	19
130-139.....	30	25	14	13	26
140-149.....	27	19	15	12	17
150-159.....	29	20	8	16	11
160-169.....	29	7	8	9	14
170-179.....	19	9	6	6	11
180-189.....	24	4	5	8	8
190-199.....	20	6	5	7	9
200-209.....	11	3	4	2	4
210-219.....	6	2	1	1	3
220-229.....	5		1	1	2
230-239.....	6		1	1	3
240-249.....	2			1	
250-259.....	5		1		
260-269.....	1		1		1
270-279.....	1				
Totals.....	416	401	244	189	223
Median.....	132	98	101.25	110.75	131.0

TABLE 42

Showing average number of pupils per teacher during 1925-26 in each county.

COUNTY	ONE ROOM SCHOOLS		TWO ROOM SCHOOLS	
	White	Colored	White	Colored
Accomac.	30	44	32	43
Albermarle.	30	33	29	37
Alleghany.	222	238	196	344
Amelia.	26	44	23	33
Amherst.	27	42	24	22
Appomattox.	28	39	21	35
Arlington.	43	.....	39	.....
Augusta.	21	26	26	26
Bath.	22	37	23	.....
Bedford.	28	30	24	33
Bland.	24	24	32	.....
Botetourt.	27	13	31	28
Brunswick.	26	33	15	89
Buchanan.	36	.....	34	.....
Buckingham.	23	39	22	35
Campbell.	29	39	27	28
Caroline.	23	86	26	33
Carroll.	47	47	30	.....
Charles City.	10	36	18	55
Charlotte.	43	46	26	47
Chesterfield.	22	39	26	33
Clarke.	30	38	28	44
Craig.	32	.....	19	.....
Culpeper.	.....	.....	.....	.....
Cumberland.	19	55	16	42
Dickenson.	41	27	31	.....
Dinwiddie.	20	49	17	56
Elizabeth City.	.....	54	.....	55
Essex.	22	37	25	39
Fairfax.	32	39	25	38
Fauquier.	23	27	29	39
Floyd.	45	31	27	.....
Fluvanna.	13	35	16	34
Franklin.	31	37	14	.....
Frederick.	26	20	25	.....
Giles.	24	16	29	25
Gloucester.	22	34	19	34
Goochland.	20	30	19	33
Grayson.	29	28	28	.....
Greene.	41	38	25	38
Greenville.	24	49	27	43
Halifax.	30	50	30	24
Hanover.	21	36	29	37
Henrico.	28	39	36	38
Henry.	37	43	28	38
Highland.	18	22	25	.....
Isle of Wight.	22	57	21	66
James City.	.....	44	.....	70
King and Queen.	21	43	19	45
King George.	30	58	29	35
King William.	24	52	17	34
Lancaster.	18	43	24	41
Lee.	44	21	43	.....
Loudoun.	32	38	28	48
Louisa.	30	35	17	44
Lunenburg.	30	44	24	49
Madison.	31	44	17	37
Matthews.	18	29	24	36
Mecklenburg.	26	55	31	52
Middlesex.	30	40	.....	40
Montgomery.	29	28	25	28
Nansemond.	33	35	37	20
Nelson.	25	42	25	36
New Kent.	16	39	17	29
Norfolk.	24	59	59	51
Nottoway.	21	49	23	42
Northampton.	25	99	21	51
Northumberland.	29	47	21	44
Orange.	28	33	21	39
Page.	29	33	27	.....
Patrick.	31	33	29	.....
Pittsylvania.	43	57	41	51

TABLE 42—CONTINUED

COUNTY	ONE ROOM SCHOOLS		TWO ROOM SCHOOLS	
	White	Colored	White	Colored
Powhatan.....	23	37	25	35
Prince Edward.....	22	53	26	43
Prince George.....	32	45		42
Princess Anne.....	22	52		
Prince William.....	35	33	23	30
Pulaski.....	32	35	32	42
Rappahannock.....	29	40	27	35
Richmond.....	28	40	1,102	106
Roanoke.....	30	31	37	40
Rockbridge.....	30	28	28	33
Rockingham.....	28	25	27	28
Russell.....	48	32	42	
Scott.....	69		34	27
Shenandoah.....	29	23	27	
Smyth.....	36	30	36	70
Southampton.....	25	53	24	48
Spotsylvania.....	26	38	35	43
Stafford.....	22	21	25	29
Surry.....	17	55	18	59
Sussex.....	18	69		118
Tazewell.....	42	36	22	21
Warren.....	30	28	24	
Warwick.....			71	37
Washington.....	38	25	34	50
Westmoreland.....	25	45	20	50
Wise.....	48	46	54	52
Wythe.....	32	38	28	69
York.....	9	34	6	26

17.5 or above

15.50 or above

TABLE 43
Distribution of certificates, 1925-26

		Number of teachers holding First, Second, or Third-grade certificates				Number of teachers holding First, Second, or Third-grade certificates				Number of teachers holding First, Second, or Third-grade certificates				
		White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	
Total counties	1,833	159	2,450	578	1,139	33	3,428	852	768	559	419	682	12,900	\$ 599
Total cities	1,613	222	546	397	416	81	187	122	.....	3	.....	.....	3,587	\$1,276
Grand total	3,446	381	2,996	975	1,555	114	3,615	890	882	562	419	682	16,487	\$ 746

		Number of teachers holding First, Second, or Third-grade certificates				Number of teachers holding First, Second, or Third-grade certificates				Number of teachers holding First, Second, or Third-grade certificates				
		White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	White	Negro	
Total counties	1,833	159	2,450	578	1,139	33	3,428	852	768	559	419	682	12,900	\$ 599
Total cities	1,613	222	546	397	416	81	187	122	.....	3	.....	.....	3,587	\$1,276
Grand total	3,446	381	2,996	975	1,555	114	3,615	890	882	562	419	682	16,487	\$ 746

TABLE 44
Source of teaching staff, 1924-25

		No. graduates V. M. I.				No. graduates V. P. I.				No. graduates Hampton Institute			
		No. graduates Bradford Normal	No. graduates Virginia Normal Institute	No. graduates V. M. I.	No. graduates V. P. I.	No. graduates Bradford Normal	No. graduates Virginia Normal Institute	No. graduates V. M. I.	No. graduates V. P. I.	No. graduates Hampton Institute	No. graduates of other colleges, universities or normals out of Virginia	No. graduates of normal schools, training departments, high schools, etc.	No. teachers who have not graduated, work done college work
Total counties	33	110	549	320	230	208	13	60	320	127	594	289	211
Total cities	26	73	477	224	113	57	3	9	232	99	322	480	21
Grand total	59	183	1,026	544	343	265	16	69	552	226	916	769	232

Total counties	28	73	477	224	113	57	3	9	232	99	322	480	21
Total cities	26	73	477	224	113	57	3	9	232	99	322	480	21
Grand total	59	183	1,026	544	343	265	16	69	552	226	916	769	232

TABLE 45 (Revised)

Showing the comparative enrollment in the State Teachers Colleges for the regular sessions of 1917-18 and 1926-27

	FARMVILLE		FREDERICKSBURG		HARRISONBURG		RADFORD		TOTAL	
	1917-18	1926-27	1917-18	1926-27	1917-18	1926-27	1917-18	1926-27	1917-18	1926-27
College students	416	1,007	126	447	241	754	252	607	1,035	2,815
High school pupils	207	.....	124	.....	35	.....	104	.....	470	.....
Total	623	1,007	250	447	276	754	356	607	1,505	2,815

¹The teachers colleges now enroll no high school pupils except in their training-school departments.

TABLE 46
Graduates of the four State Teachers Colleges of Virginia for four-year period, 1923-27

YEAR	FARMVILLE		FREDERICKSBURG		HARRISONBURG		RADFORD	
	Curricula		Curricula		Curricula		Curricula	
	Elementary	High School	Elementary	High School	Elementary	High School	Elementary	High School
2 Yr.	4 Yr.	2 Yr.	4 Yr.	2 Yr.	4 Yr.	2 Yr.	4 Yr.	2 Yr.
1923-24.....	138	4	105	25	53	1	95	0
1924-25.....	180	3	105	28	57	6	139	0
1925-26.....	202	8	0	34	72	5	17	119
1926-27.....	214	16	0	60	81	7	30	137

TABLE 47

Geographical distribution of students of State Teachers Colleges of Virginia, regular session, 1926-1927

COUNTIES	Farmville	Fredericksburg	Harrisonburg	Radford
Accomac.	13	14	10	
Albemarle.	6	1	18	1
Alleghany	12	2	5	1
Amelia.	9		1	
Amherst.	10		2	4
Appomattox	10		4	
Arlington.				
Augusta.	7		33	2
Bath.	2		3	
Bedford.	12		2	5
Bland.	2			8
Botetourt.	5	1	12	14
Brunswick.	11	6	5	
Buchanan.		1		1
Buckingham.	13		4	
Campbell.	17		4	
Caroline.	1	8		
Carroll.	1			9
Charles City.	1	1	1	2
Charlotte.	14	5	5	2
Chesterfield.	3	1	1	1
Clarke.	1		4	
Craig.			1	4
Culpeper.	7	6	5	
Cumberland.	11			1
Dickenson.			1	1
Dinwiddie.	27	2	1	5
Elizabeth City.	6	18	20	
Essex.	2	10		
Fairfax.	2	2	13	
Fauquier.		3	10	
Floyd.				16
Fluvanna.	2	1	6	
Franklin.	4			15
Frederick.			1	
Giles.				14
Gloucester.		5	2	
Goochland.		3	1	
Grayson.			1	24
Greene.		2	5	1
Greenville.		4	1	
Halifax.	22	5	17	12
Hanover.	2	6	7	
Henrico.		5	3	
Henry.	3		1	8
Highland.	1	1	11	1
Isle of Wight.	20	3	3	1
James City.	2		5	
King and Queen.	3	6		
King George.		2		
King William.		5	3	
Lancaster.	6	9		
Lee.	4			38
Loudoun.	1	3	15	1
Louisa.	1	5	6	3
Lunenburg.	23	2	3	6
Madison.	1	3	11	
Mathews.	4	5	1	
Mecklenburg.	28	4	6	1
Middlesex.	9	8		1
Montgomery.	3		7	33
Nansemond.	10	3	4	1
Nelson.	9		4	1
New Kent.		1	1	
Norfolk.	18	7	10	1
Northampton.	8	10	8	
Northumberland.	6	28		
Nottoway.	22	1	3	
Orange.	6	9	5	
Page.	1		10	
Patrick.	5	1	5	11
Pittsylvania.	17	1	19	16
Powhatan.	8		3	
Prince Edward.	63	1	2	

TABLE 47—CONTINUED

COUNTIES	Farmville	Fredericksburg	Harrisonburg	Radford
Prince George.....	7	2	1	1
Prince William.....		4		
Princess Anne.....	8		5	5
Pulaski.....	2		2	29
Rappahannock.....		1		
Richmond.....		6		
Roanoke.....	10		2	17
Rockbridge.....	5	1	16	7
Rockingham.....	2	1	51	
Russell.....			3	
Scott.....	2		3	31
Snemandoah.....	1		31	
Smyth.....	2			16
Southampton.....	30	4	6	7
Spotsylvania.....		19	1	
Stafford.....		2		
Surry.....	11	4	3	2
Sussex.....	19	7	2	1
Tazewell.....	10	2	3	28
Warren.....	1		5	
Warwick.....	1	1	3	1
Washington.....				46
Westmoreland.....		9	6	
Wise.....	6	1	8	18
Wythe.....	6		3	11
York.....	5		1	
Totals from counties.....	663	293	513	500
CITIES				
Alexandria.....	1	4	1	
Bristol.....	4	1		3
Buena Vista.....			6	1
Charlottesville.....	13	1	12	
Clifton Forge.....	2		9	1
Danville.....	16	1	3	2
Fredericksburg.....		27		
Harrisonburg.....			27	
Lynchburg.....	31	6	7	2
Newport News.....	16	27	18	2
Norfolk.....	65	13	51	4
Petersburg.....	20		7	1
Portsmouth.....	38	14	21	1
Radford.....			1	42
Richmond.....	14	8	12	
Roanoke.....	38	1	11	10
Staunton.....	2		4	
Suffolk.....	12	5		
Williamsburg.....	2		1	
Winchester.....	3	1	8	
Total from cities.....	277	109	199	69
Out of State students.....	67	40	42	38
Grand total.....	1,007	442	754	607

TABLE 48

Occupations of parents of students registered in the four State Teachers Colleges of Virginia, 1927-1928

	Farmville	Fredericksburg	Harrisonburg	Radford
Farming and farm products.....	210	130	230	220
Merchandising.....	131	69	105	54
Professional men.....	44	21	56	22
Contractors.....	19	5	11	8
Real estate and insurance.....	27	{ 72	17	3
Business executives.....	24		35	11
Clerical positions.....	84	18	55	16
Skilled labor.....	38	16	82	48
Unskilled labor.....	19	7	33	34
Widows.....	40		38	14
Not stated or unclassified.....	11	31	91	9
Total number students reporting...	647	369	753	439

TABLE 49

Annual incomes of parents of students registered in the four State Teachers Colleges of Virginia, 1927-1928

	Farmville	Fredericksburg	Harrisonburg	Radford
Less than \$1,000.....		85	90	116
\$1,000 to 1,250.....	8	67	70	95
1,251 to 1,500.....	13	38	52	52
1,501 to 1,750.....	2	21	15	29
1,751 to 2,000.....	17	56	114	60
2,001 to 2,500.....	16	41	70	65
2,501 to 3,000.....	18	18	81	65
3,001 to 3,500.....	4	16	11	65
3,501 to 4,000.....	15	5	26	65
Over \$4,000.....	17	10	62	15
Number students reporting.....	110	369	648	432
Number students:				
Self-supporting.....	40	18	31	36
Partly self-supporting.....	24	46	87	144
Borrowing money.....	80	69	190	131

TABLE 50

Showing the education and training of college instructors exclusive of the president and of the training school staff in the four State Teachers Colleges, 1927-28

TEACHERS COLLEGE	NUMBER OF INSTRUCTORS			COLLEGE DEGREES				
	Men	Women	Total	Ph. D.	M. A. or M. S.	B. A.	B. S.	*Normal School Graduates
Farmville.....	8	37	45	3	15	3	20	4
Fredericksburg.....	6	20	26	3	10	4	6	3
Harrisonburg.....	13	22	35	7	19	5	3	1
Radford.....	9	14	23	5	11	.....	4	3
Total.....	36	93	129	18	55	12	33	11

*This column includes only those having the Normal Professional Certificate or its equivalent but not having a degree.

TABLE 51
Size of classes in the Teachers Colleges

	Farmville	Fredericksburg	Harrisonburg	East Radford
Below 5.....	4	3	.....	1
5-10.....	22	12	5	5
25-35.....	63	22	42	19
36-40.....	32 physical education, music, writing	3	26	11
41-45.....	5	2	27	9
46-50.....	7 physical education	1	5	2
51-60.....	7 physical education	.....	4	5 physical education
Above 60.....	1 physical education	.....	.....	1 physical education

TABLE 52
Showing the instructors' salaries in the State Teachers Colleges exclusive of the president, 1927-28

SALARIES	Farmville			Fredericksburg			Harrisonburg			Radford			Total			
	Male Instructors	Female Instructors	Supervising Teachers	Total												
\$3,400-\$3,599.....	1						1						1			1
3,200-3,399.....	1												1			1
3,000-3,199.....	3			1			7	1		1			12	1		13
2,800-2,999.....							2						2			2
2,600-2,799.....	4			2			1	2		7	2		12	4		16
2,400-2,599.....				2	2		2	4	1	1			5	4	1	10
2,200-2,399.....				2	2		3			5			2	10		12
2,000-2,199.....		19	3		6		8			1			34	3		37
1,800-1,999.....		8			3		1	1		1			13	1		14
1,600-1,799.....		2	6		5	2		5					7	13		20
1,400-1,599.....		2			3	3		9		3	1		9	13		21
1,200-1,399.....		5			1	4							5	6	9	1
1,000-1,199.....													7	1	7	7
800-999.....													2		2	2
600-799.....																
400-599.....																
200-399.....				1											1	1
Total.....	8	36	10	5	20	9	13	19	16	9	12	15	35	89	50	17

TABLE 53

Showing the annual appropriation made by the State to the Teachers Colleges and the enrollment and per capita cost for both regular year and summer school. Note that, in spite of a practically doubled attendance in the Teachers Colleges, the increase in the State appropriations for the last year has not been significant, and the per capita cost has dropped decidedly

FREDERICKSBURG

	SUPPORT APPROPRIATION		PER CAPITA COST		ENROLLMENT	
	Winter	Summer	Winter	Summer	Winter	Summer
1919-20.....	\$ 46,575 74	\$ 7,762 62	\$ 175 09	\$ 28 96	266	268
1920-21.....	57,900 00	9,650 00	201 74	28 29	287	341
1921-22.....	57,248 58	9,541 42	276 56	27 89	207	342
1922-23.....	62,511 43	10,418 57	195 34	36 17	320	288
1923-24.....	60,069 43	10,011 57	185 39	37 35	324	268
1924-25.....	51,801 43	8,633 57	157 45	23 14	329	373
1925-26.....	50,485 72	8,414 28	125 58	26 29	402	320
1926-27.....	47,982 86	7,997 14	107 58	27 01	446	296

HARRISONBURG

1919-20.....	\$ 46,842 86	\$ 7,807 14	\$ 151 59	\$ 12 39	309	630
1920-21.....	53,400 00	8,900 00	154 78	12 69	345	701
1921-22.....	53,400 00	8,900 00	139 42	9 72	383	914
1922-23.....	67,735 72	11,289 28	160 51	11 48	422	983
1923-24.....	68,355 43	11,392 57	122 28	12 12	559	940
1924-25.....	63,608 58	10,601 42	99 54	12 60	639	841
1925-26.....	61,264 29	10,210 71	85 50	12 46	714	819
1926-27.....	65,400 00	10,900 00	86 73	14 23	754	766

FARMVILLE

1919-20.....	\$ 70,000 00	\$ 10,000 00	\$ 108 02	\$ 32 25	648	310
1920-21.....	81,639 25	11,662 75	127 76	29 15	639	400
1921-22.....	87,878 00	12,554 00	134 98	21 46	651	585
1922-23.....	95,497 50	13,642 50	135 65	19 02	704	717
1923-24.....	92,496 25	13,213 75	124 15	19 85	745	666
1924-25.....	79,323 13	11,331 87	96 50	19 53	822	580
1925-26.....	74,970 00	10,710 00	82 56	20 43	908	524
1926-27.....	81,908 75	11,701 25	81 33	26 83	1,007	436

TABLE 54

Showing the per capita cost of education to the students at the four Teachers Colleges

REGULAR SESSION OF THREE QUARTERS	Farmville	Fredericksburg	Harrisonburg	Radford
1919-20.....	\$ 196 00	\$ 192 00	\$ 192 00	\$ 192 00
1920-21.....	223 00	220 00	219 00	222 00
1921-22.....	223 00	220 00	219 00	222 00
1922-23.....	223 00	220 00	219 00	223 00
1923-24.....	229 00	226 00	225 00	230 00
1924-25.....	245 00	241 00	240 00	245 00
1925-26.....	266 00	241 00	240 00	245 00
1926-27.....	273 00	268 00	267 00	269 00

SUMMER SESSION OF ONE QUARTER	Farmville	Fredericksburg	Harrisonburg	Radford
1919-6 weeks only.....	\$ 28 50	6 weeks \$31 50	Full quarter \$50 50	Full quarter \$58 00
1920- " "	31 50	" "	58 00	" "
1921- " "	31 50	" "	58 00	" "
1922-Full quarter.....	59 00	Full quarter 59 00	" "	" "
1923- " "	59 00	" "	59 00	" "
1924- " "	65 00	" "	64 00	" "
1925- " "	74 00	" "	72 00	" "
1926- " "	76 00	" "	73 00	" "

*Radford reported for summer sessions 1920-27, instead of summer session 1919-26.

This schedule of costs applies to Virginia teachers and Virginia students who promise to teach for two years in Virginia. Virginia students who have not taught for two years in Virginia and who do not promise to teach for two years in the State pay a tuition fee of \$10.00 per quarter additional. All out of State students pay \$20.00 per quarter in addition to above figures.

TABLE 55

Dormitory accommodations at the four State Teachers Colleges, 1927-28

COLLEGE	No. Dormitory Rooms	NUMBER ROOMS OCCUPIED BY				Students Rooming in Private Homes	Students Rooming in Leased Buildings	Rental for Private Rooms	Annual Rental for Leased Buildings
		One Student	Two Students	Three Students	Four Students				
Farmville.....	258	5	98	100	55	87	173	\$4,698	\$8,278 00
Fredericksburg.....	110	5	62	43	.....	.....	92	.....	6,701 40
Harrisonburg.....	220	.....	51	152	17	61	136	2,700	6,975 00
Radford.....	171	1	98	72	.....	.....	45	.....	2,800 00
Totals.....	759	11	309	367	72	148	446	\$7,398	\$24,754 40

TABLE 56
Number of days in year devoted to various activities of supervisors of State Department of Education.

TABLE 57

Duties of division superintendents—frequency of mention by 78 superintendents

I.	General control—total 4,289	
A.	Board of Education policy:	
1.	Cooperation with board	1,643
2.	Survey and publicity	1,329
3.	Cooperative agencies	539
B.	Administrative organization	778
II.	Executive management—total 6,255	
A.	Office management and routine	1,787
B.	Community management:	
1.	Relations with parents	1,123
2.	Welfare duties	514
3.	Civic duties	533
C.	Professional status and miscellaneous duties:	
1.	Professional improvement	1,055
2.	Miscellaneous executive duties	1,243
III.	Business management—total 5,765	
A.	Financial accounting and management:	
1.	Fiscal management	890
2.	Payroll and cash accounting	613
B.	School plant:	
1.	Supervision of work	655
2.	Selection and purchase of supplies	699
3.	Care of books and supplies	132
4.	Distribution of books and supplies	302
C.	School plant—operation and maintenance:	
1.	Inspection and supervision of janitorial service.....	539
2.	Inspection and care of building and equipment.....	267
3.	Inspection and care of grounds.....	89
D.	Expansion:	
1.	Building programs and surveys	864
2.	Construction	412
3.	New equipment	303
IV.	Teaching staff—total 4,341	
1.	Personal welfare of teachers	1,491
2.	Employment of teachers	1,984
3.	Professional improvement of teachers.....	866
V.	Pupils—total 3,280	
1.	Census and attendance	1,074
2.	Classification	513
3.	Promotion and progress	615
4.	Reports and records	501
5.	Discipline	577
VI.	Curriculum and special activities:	
A.	Curriculum—total 2,270	
1.	Aims	369
2.	Textbooks	321
3.	Schedule management	1006
4.	Curriculum building	512
5.	Extension	162

TABLE 57—CONTINUED

B. Special activities—total 1,455					
1. Student organizations					154
2. Athletic activities					374
3. Social activities					87
4. School publications					54
5. Assemblies					597
6. Graduation programs					189
VII. Instruction:					
A. Teaching and testing—total 1,063					
1. Teaching contacts					92
2. Classroom management					176
3. Administration of tests					561
4. Diagnosis and interpretation					234
B. Supervision—total 1,957					
1. Principals and supervisors					424
2. Technique of teaching					1,063
3. Conferences and meetings					470
VIII. Special services—total 2,335					
1. Supervision of playground					104
2. Supervision of lunch period					64
3. Special health service					348
4. Cooperation with health officers					330
5. Library					170
6. Guidance					740
7. Transportation of pupils					523
8. Miscellaneous					49

TABLE 58

Trends in school census, enrollment and attendance, 1900-1925

WHITE	*1900	*1910	*1915	†1920	‡1925
School population.....	341,992	398,408	435,255	460,246	484,732
School enrollment.....	250,697	282,482	343,159	375,790	398,501
Average daily attendance.....	149,915	186,239	233,657	274,923	313,996
COLORED					
School population.....	214,404	217,760	222,258	220,678	216,802
School enrollment.....	119,898	119,657	131,051	149,066	152,974
Average daily attendance.....	66,549	73,155	83,483	99,212	110,697

*Data from "The Public Schools of Virginia," 1919, Table 11a, p. 296.

†Data from Annual Report of the Superintendent of Public Instruction, 1920-21, p. 119.

‡Data from Annual Report of the Superintendent of Public Instruction, 1926, pp. 69 and 76.

TABLE 59

Per cent of trends of school enrollment and attendance, 1900-1925

WHITE	*1900	*1910	*1915	†1920	‡1925
Per cent of census enrolled.....	73.3	71.9	78.8	81.7	82.2
Per cent of census in average daily attendance.....	43.8	46.8	53.7	59.8	64.4
Per cent of enrollment in average daily attendance.....	59.8	62.4	68.1	73.2	78.8
COLORED					
Per cent of census enrolled.....	55.9	54.5	59.0	67.5	70.6
Per cent of census in average daily attendance.....	31.0	33.6	37.6	44.9	51.1
Per cent of enrollment in average daily attendance.....	55.5	61.1	63.7	66.6	72.4

*Data from "The Public Schools of Virginia," 1919, p. 297.

†Data computed from preceding table.

TABLE 60

Per cent of pupils promoted, failed and dropped in public schools—Grades 1 to 12, 1925-1926

WHITE	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Per cent promoted.....	60.1	73.5	73.3	68.2	62.9	69.8	68.4	67.0	71.6	74.5	82.9	79.7
Per cent failed.....	18.1	13.1	13.5	17.2	15.4	16.5	17.3	17.7	15.5	14.7	8.6	9.9
Per cent dropped.....	21.8	13.4	13.2	14.6	21.7	13.7	14.3	15.3	12.9	10.8	8.5	10.4
COLORED												
Per cent promoted.....	57.4	65.5	65.6	63.4	66.2	65.0	64.7	71.4	75.4	78.7	76.8	80.5
Per cent failed.....	28.9	23.2	23.1	24.6	20.8	21.8	21.5	15.2	14.1	13.1	12.4	11.0
Per cent dropped.....	13.7	11.3	11.3	12.0	13.0	13.2	13.8	13.4	10.5	8.2	10.8	8.5

Per cents computed on the basis of data from Annual Report of the Superintendent of Public Instruction, 1925-26, pp. 136-137.

TABLE 61

Percentage of pupils under age, at age and over age (one year basis) in county schools, according to the Virginia standard (entrance age 7), 1925-1926.

GRADE	WHITE			COLORED		
	Under Age	At Age	Over Age	Under Age	At Age	Over Age
K.....		45.3	64.7		15.3	84.7
1.....	33.2	26.6	40.2	15.9	22.2	61.9
2.....	25.2	27.5	47.3	7.2	15.7	77.1
3.....	22.8	24.5	52.7	6.6	12.8	80.6
4.....	20.4	21.4	58.2	6.1	12.4	81.5
5.....	20.8	24.3	54.9	7.	9.5	83.5
6.....	16.7	20.4	62.9	5.6	10.1	84.3
7.....	36.5	21.4	42.1	15.2	19.5	64.3
8.....	44.6	23.5	31.9	19.0	22.2	58.8
9.....	48.0	24.8	27.2	25.	21.7	53.3
10.....	51.5	23.6	24.9	33.6	31.	35.4
11.....	56.2	25.3	18.5	48.5	25.3	26.2
12.....	89.6	10.4		91.7		8.3

Data computed from the Annual Report of the Superintendent of Public Instruction, 1925-26, table, age-grade distribution for counties, pp. 114-115.

TABLE 62

Percentage of pupils under age, at age and over age (one year basis) in city schools of Virginia, according to the Virginia standard (entrance age 7), 1925-1926.

GRADE	WHITE			COLORED		
	Under Age	At Age	Over Age	Under Age	At Age	Over Age
K.....		99.7	.3			
1.....	60.9	24.5	85.4	38.0	30.2	31.8
2.....	54.3	26.2	19.5	27.3	25.9	46.8
3.....	48.6	26.3	25.1	22.3	22.7	55.
4.....	44.2	24.4	31.4	20.	19.4	60.6
5.....	39.4	26.2	34.4	19.6	18.3	62.1
6.....	39.3	25.3	35.4	19.7	20.7	59.6
7.....	68.5	18.7	12.8	42.4	22.6	35.0
8.....	65.2	19.7	15.1	44.5	23.5	32.0
9.....	71.2	18.9	9.9	50.1	20.7	29.2
10.....	73.3	15.4	11.3	48.9	30.2	20.9
11.....	72.6	15.9	11.5	64.2	12.8	23.
12.....	85.9	10.6	3.5	77.5	14.2	8.3

Data computed from the Annual Report of the Superintendent of Public Instruction, 1925-26, table, age-grade distribution for cities, pp. 114-115.

TABLE 63

Percentage of pupils under age, at age and over age (one year basis) in all public schools of Virginia, according to the Virginia standard (entrance age 7), 1925-1926.

GRADE	WHITE			COLORED		
	Under Age	At Age	Over Age	Under Age	At Age	Over Age
K.....		78.1	21.9		15.9	84.1
1.....	37.8	26.2	36.	19.3	23.6	57.1
2.....	31.2	27.2	41.6	11.6	17.3	71.1
3.....	27.8	24.8	47.4	9.8	14.9	75.3
4.....	24.8	21.9	53.3	9.3	14.1	76.6
5.....	25.2	22.4	52.4	10.3	11.8	77.9
6.....	21.7	29.9	48.4	9.9	13.2	76.9
7.....	40.2	21.2	38.6	24.5	20.6	54.9
8.....	51.3	22.1	26.6	35.8	23.0	41.2
9.....	56.4	22.6	21.0	43.6	20.9	35.5
10.....	60.2	21.7	18.1	46.2	31.2	22.6
11.....	62.3	21.8	15.9	55.5	23.3	21.2
12.....	86.3	10.6	3.1	79.5	13.3	7.2

Data computed from the Annual Report of the Superintendent of Public Instruction, 1925-26, table, age-grade distribution for State, pp. 114-115.

TABLE 64

Comparison of 1925-26 and 1926-27 reports on corrections and prophylaxis

	COUNTIES		CITIES		TOTALS FOR COUNTIES AND CITIES	
	1925-26	1926-27	1925-26	1926-27	1925-26	1926-27
Number with defects.....	251,009	242,177	41,055	55,031	292,064	297,208
Number with teeth corrected.....	31,084	40,024	16,054	18,726	47,138	58,750
Number with hearing corrected.....	1,579	1,851	575	404	2,154	2,255
Number with vision corrected.....	6,138	7,188	2,527	3,227	8,665	10,415
Number with throats corrected.....	3,402	4,051	4,281	4,817	7,683	8,868
Under weight 10% or more.....	18,842	22,921	4,146	4,767	22,988	27,688
Number vaccinated.....	41,404	41,052	44,784	47,312	86,188	88,364

TABLE 65
Trade and industrial education—Day unit classes

CENTER	SCHOOL	SUBJECT	Total Enrol.	Aver. Atten.	Total Cl. Hr.	Total Expenses	Federal	State	Local	Per Cap. Cost
Arlington county.....	Roslyn.....	Building trades.....	34	28.5	27	1,320 \$ 1,955 00	\$ 977 50	\$ 325 83	\$ 651 67	\$ 65 89
Brunswick county.....	Lawrenceville.....	Carpentry.....	13	12.2	12	1,476 1,350 00	300 00	750 00	110 65	Colored
	Lawrenceville.....	Bricklaying and plastering.....	34	32.2	32	1,476 1,350 00	300 00	750 00	41 92	Colored
Goochland county.....	Fauquier Training.....	Carpentry.....	20	17.5	18	960 1,100 00	550 00	183 34	366 66	62 85
Grayson county.....	Grassy Creek.....	Auto mechanics.....	13	10.1	6.1	450 900 00	337 50	225 00	337 50	89 18
Greene county.....	B. R. I. S.....	Hand weaving.....	46	43.5	39	1,080 720 00	90 00	390 00	240 00	16 55
Hampton.....	Hampton High.....	Electric wiring.....	31	28.1	22.7	1,110 1,999 98	617 01	716 31	666 66	71 41
	Hampton High.....	Electric wiring.....	28	26.2	22.4	370 520 07	182 99	163 83	173 25	19 85
Newport News.....	Newport News.....	Drafting.....	49	40.5	37.6	1,080 2,200 00	1,080 00	366 67	733 33	44 32
	Newport News.....	Printing.....	13	11.5	9.5	1,080 2,100 00	1,050 00	350 00	700 00	173 91
Norfolk.....	Maury High.....	Auto mechanics.....	28	22.2	11.5	558 2,100 00	120 00	764 50	1,215 50	94 59
	Maury High.....	Related subjects.....	50	46.5	36.7	225 760 00	275 64	231 03	253 33	16 34
	Maury High.....	Electric wiring.....	19	16.1	9	558 2,300 00	160 00	777 83	1,362 17	142 79
	Maury High.....	Printing.....	18	14.7	9.5	558 2,100 00	120 00	764 50	1,215 50	142 85
	Maury High.....	Machine shop.....	7	6.5	4.5	363 1,050 00	210 00	232 25	607 75	161 53
	Maury High.....	Related subjects.....	72	53.5	19.3	525 1,260 00	275 73	773 25	1,150 75	23 55
	B. T. Washington.....	Auto mechanics.....	38	35.8	30.7	558 1,060 00	212 00	395 17	452 83	29 60
	B. T. Washington.....	Carpentry.....	47	46.2	39.5	558 1,400 00	280 00	417 83	702 17	30 30
	B. T. Washington.....	Related subjects.....	124	111.1	87.5	558 1,300 00	260 00	455 00	585 00	11 70
	B. T. Washington.....	Bricklaying.....	40	39.2	34.5	558 1,260 00	252 00	414 50	593 50	32 14
	B. T. Washington.....	Related bricklaying.....	40	39	34	333 540 00	280 25	259 75	13 84	"
Petersburg.....	Va. N. and I. I.....	Auto mechanics.....	40	39	37.5	1,416 1,800 00	75 00	970 00	46 15	Colored
	Va. N. and I. I.....	Carpentry.....	8	7.3	7	1,416 1,500 00	227 50	62 50	1,210 00	205 47
	Va. N. and I. I.....	Tailoring.....	25	20.2	16.6	1,416 1,560 00	325 00	65 00	1,170 00	77 61
	Va. N. and I. I.....	Electric wiring.....	17	14.2	12	1,416 1,166 66	160 55	69 45	936 06	81 15
	Va. N. and I. I.....	Related subjects.....	22	18.3	14.7	387 1,500 00	350 00	83 32	1,066 68	81 96
	Va. N. and I. I.....	Related subjects.....	64	30.7	32	809 1,166 66	246 83	6 95	913 88	23 01
	Va. N. and I. I.....	Auto mechanics.....	36	36	36	1,016 1,166 66	270 83	6 95	888 88	32 40
	Va. N. and I. I.....	Related subjects.....	70	62.5	51.3	735 1,316 66	303 33	7 79	995 54	20 90
Richmond.....	John Marshall High.....	Machine shop.....	38	32.1	22.7	1,098 1,830 00	630 00	360 00	840 00	57 00
	John Marshall High.....	Related machine shop.....	38	32.1	22.7	1,098 2,240 00	773 50	407 83	1,058 67	69 78
	John Marshall High.....	Electric wiring.....	34	29.3	24	1,098 2,240 00	773 50	394 84	1,071 66	76 45
	John Marshall High.....	Related electric wiring.....	42	35	25	1,732 2,240 00	773 50	357 83	1,108 67	64 00
	Totals.....		1,188	.....	.....	28,028 \$19,041 69	\$12,983 18	\$10,438 05	\$25,620 46	\$ 2,242 65

TABLE 65—CONTINUED
Trade and industrial education—Evening classes

CENTER	SCHOOL	SUBJECT	Total Enrol.	Aver. Enrol.	Aver. Atten.	Total Cl. Hr.	Total Expenses	Federal	State	Local	Per Cap. Cost
Bristol	Bristol High.....	Textile, mathematics, science.....	19	21	5.1	212	\$ 108 00	\$ 54 00	\$ 18 00	\$ 36 00	\$ 5 14
Dickenson county	Clinebeo.....	Coal mining.....	28	27	25	30	60 00	1 00	39 00	20 00	2 22
	Clinebeo.....	Coal mining.....	20	20	20	6	9 00	1 00	5 00	3 00	45 ^a
	Clinebeo.....	Coal mining.....	16	16	16	6	9 00	1 00	5 00	3 00	60 ^a
	Clinebeo.....	Coal mining.....	15	15	15	6	9 00	1 00	5 00	3 00	60 ^a
Farmville	Farmville High.....	Sewing and cooking.....	11	11	11	32	48 00	24 00	8 00	16 00	4 36
	Farmville High.....	Auto mechanics.....	18	18	10	16	32 00	16 00	5 33	10 67	1 77 ^a
Lee county	Calvin.....	Coal mining.....	70	56	47	30	60 00	1 00	39 00	20 00	1 07
	Leona Mines.....	Coal mining.....	60	44.5	31	32	60 00	11 00	29 00	20 00	1 34 ^a
	St. Charles.....	Coal mining.....	30	22	15	30	60 00	1 00	39 00	20 00	2 73 ^a
	St. Charles.....	Coal mining.....	38	24	18	30	42 00	1 00	27 00	14 00	1 75 ^a
	St. Charles.....	Coal mining.....	30	19	15	30	60 00	1 00	39 00	20 00	3 16 ^a
Lynchburg	Lynchburg High.....	Mechanical drawing, mathematics	13	11	5.3	180	300 00	99 99	100 01	100 00	27 27
	Lynchburg High.....	Mechanical drawing.....	10	9	7	40	69 00	1 00	45 00	23 00	7 64
	Lynchburg High.....	Shop mathematics.....	13	10	2	8.5	61	108 00	1 00	71 00	36 00
	Lynchburg High.....	Textile calculations.....	16	10	3.5	9	106	260 00	86 66	86 67	10 58 ^a
	Lynchburg High.....	Loom fixing.....	18	15	10	52	140 00	46 66	46 67	19 25 ^a	
	Lynchburg High.....	Shoe cutting.....	65	56	5	40	160	659 00	61 37	377 93	9 33 ^a
	Lynchburg High.....	Shoe cutting.....	.....	.....	.....	.....	.....	.....	.....	.....	1 16 ^a
	Lynchburg High.....	Shoe cutting.....	.....	.....	.....	.....	.....	.....	.....	.....	.....^a
	Lynchburg High.....	Shoe cutting.....	.....	.....	.....	.....	.....	.....	.....	.....	.....^a
	Lynchburg High.....	Shoe cutting.....	.....	.....	.....	.....	.....	.....	.....	.....	.....^a
Newport News	Newport News High.....	Shop mathematics.....	17	13.2	4.5	96	144 00	72 00	24 00	48 00	10 90
	Newport News High.....	Mechanical drawing.....	11	11	6	48	72 00	36 00	12 00	24 00	6 54 ^a
	Newport News High.....	Ship design.....	13	13	5	36	54 00	27 00	9 00	18 00	4 15 ^a
	Newport News High.....	English.....	17	12	6	48	72 00	.....	48 00	24 00	6 00 ^a
	Newport News High.....	Related subjects.....	73	53	27	48	180 00	.....	120 00	60 00	3 45 ^a
Norfolk	Maury High.....	Sheet metal drafting.....	16	12.7	10	138	276 00	77 00	107 00	92 00	21 73
	Maury High.....	Printing.....	11	9	6.5	138	276 00	77 00	107 00	92 00	30 66 ^a
	Maury High.....	Shop mathematics.....	26	24.7	15.5	138	276 00	87 00	97 00	92 00	11 13 ^a
	Maury High.....	Shop card writing.....	20	15.2	8.5	138	276 00	112 00	112 00	72 00	18 16 ^a
	Maury High.....	Physics.....	15	12.7	8.5	138	276 00	112 00	112 00	72 00	21 73 ^a
	Maury High.....	Auto ignition.....	19	13.2	8	138	276 00	112 00	112 00	72 00	20 91 ^a
	Maury High.....	Carpentry.....	12	9.7	7	138	276 00	112 00	112 00	72 00	28 45 ^a
	Maury High.....	Commercial art.....	15	11	7.5	138	276 00	112 00	112 00	72 00	25 09 ^a
	Maury High.....	Shop arithmetic.....	21	5	5.5	138	276 00	112 00	112 00	72 00	15 16 ^a

Maury High.....	13	11.5	7.5	88	117.32	58.66	15.3	White
Theory electricity.....	18	15.7	10.5	138	276.00	92.00	17.58	^a
Plumbing.....	11	9.5	7.2	138	276.00	92.00	29.05	^a
Radio operation.....	10	9.5	6	86	172.00	82.00	32.67	^a
Machine shop.....	19	15	6.5	138	276.00	112.00	57.33	^a
Mechanical drawing.....	22	18	8	86	172.00	82.00	92.00	^a
Architectural drawing.....	19	17.2	12	138	276.00	122.00	57.33	^a
Armature winding.....	18	15	9	138	276.00	112.00	62.00	^a
Auto mechanics.....	25	23.7	16	138	172.50	63.75	57.50	Colored
Carpentry.....	20	17.5	12	138	172.50	61.25	57.50	^a
Bricklaying.....	25	19	12.5	138	172.50	63.75	51.25	^a
Nursing.....	32	25	21.5	138	172.50	53.75	51.25	^a
Nursing.....	29	29	12.5	138	172.50	53.75	51.25	^a
Nursing.....	14	14	13	138	172.50	47.25	67.75	^a
B. T. Washington.....	14	14	13	138	172.50	47.25	67.75	^a
B. T. Washington.....	176.00	176.00	176.00	112.00	112.00	112.00	112.00	White
John Marshall High.....	16	13.8	9	108	216.00	90.00	54.00	White
Mathematics, mechanical drawing.....	26	24.5	18	274	308.00	69.33	102.67	^a
Dietetics.....	34	20.9	12.7	82	164.00	76.00	33.34	^a
Cafeteria operation.....	21	21	12	8	16.00	8.00	2.67	^a
Press operation.....	31	31	28	60	120.00	60.00	20.00	^a
Roanoke.....	Jefferson High.....	Shop mathematics.....	41	18.2	16.6	188	387.50	2.00
Jefferson High.....	Jefferson High.....	Shop mathematics.....	41	18.2	16.5	188	216.67	2.00
Jefferson High.....	Jefferson High.....	Mechanical drawing.....	41	28	16.6	188	391.67	2.00
Dante.....	Dante.....	Coal mining.....	26	26	22	33	57.00	1.00
Dante.....	Dante.....	Coal mining.....	28	28	22	8	12.00	1.00
Dante.....	Dante.....	Coal mining.....	26	26	25	6	9.00	1.00
Dante.....	Dante.....	Coal mining.....	25	25	33	33	57.00	1.00
Dante.....	Dante.....	Coal mining.....	40	35	6	12.00	1.00	30
Dante.....	Dante.....	Coal mining.....	35	35	30	4.5	9.00	1.00
Drill.....	Wilder.....	Coal mining.....	31	31	31	30	45.00	1.00
Wilder.....	Wilder.....	Coal mining.....	28	27.5	27	30	45.00	1.00
Wilder.....	Wilder.....	Coal mining.....	50	50	45	12	18.00	1.00
Wilder.....	Wilder.....	Coal mining.....	42	36	31	30	350.00	1.00
Schofield.....	Schofield.....	Textile calculation.....	15	13	10.5	94	188.00	33.00
Schofield.....	Schofield.....	Textile calculation.....	15	13	10	94	141.00	32.50
Schofield.....	Schofield.....	Textile calculation.....	15	13	10.5	94	94.00	22.00
Schofield.....	Schofield.....	Textile calculation.....	8	7	5.5	94	94.00	22.00
Schofield.....	Schofield.....	Textile calculation.....	13	9.5	8.5	94	94.00	22.00
Schofield.....	Schofield.....	Textile calculation.....	15	13	10.5	94	94.00	22.00
Schofield.....	Schofield.....	Textile calculation.....	8	7	7	94	94.00	22.00
Schofield.....	Schofield.....	Textile calculation.....	12	10	7	94	94.00	22.00
Pittsylvania.....	Schofield.....	Textile calculation.....	10	8.5	9	47	52.00	1.00
Pittsylvania.....	Schofield.....	Textile calculation.....	15	13	10	94	188.00	33.00
Pittsylvania.....	Schofield.....	Textile calculation.....	15	13	10	94	141.00	32.50
Pittsylvania.....	Schofield.....	Textile calculation.....	15	13	10.5	94	94.00	22.00
Pittsylvania.....	Schofield.....	Textile calculation.....	8	7	5.5	94	94.00	22.00
Pittsylvania.....	Schofield.....	Textile calculation.....	13	9.5	8.5	94	94.00	22.00
Pittsylvania.....	Schofield.....	Textile calculation.....	15	13	10.5	94	94.00	22.00
Pittsylvania.....	Schofield.....	Textile calculation.....	8	7	7	94	94.00	22.00
Pittsylvania.....	Schofield.....	Textile calculation.....	12	10	7	94	94.00	22.00

TABLE 65—CONTINUED

CENTER	SCHOOL	SUBJECT	Total Enrol.	Aver. Enrol.	Aver. Atten.	Total Cl. Hr.	Total Expenses	Federal	State	Local	Per Cap. Cost	
			\$	\$	\$	\$	\$	\$	\$	\$	\$	White
Jewell Ridge.....	Coal mining.....	31	22.5	16	4.4	40	60 00	20 00	20 00	20 00	2 66	Colored
Williamsburg High.....	Carpentry.....	11	10.5	4.4	4	30	60 00	20 00	20 00	20 00	5 71	a
Williamsburg High.....	Masonry.....	12	10	4		30	40 00	12 11	17 89	10 00	4 00	
Glanmorgan.....	Coal mining.....	35	29.5	25		32	500 00	1 00	499 00	1 00	1 69	White
Osage.....	Coal mining.....	26	21.5	21		30	250 00	115 00	98 75	75	11 62	a
Sionoga.....	Coal mining.....	67	65	62		32	250 00	124 00	32 25	93 75	3 84	a
Norton.....	Coal mining.....	23	23	23		90	333 34	166 67	166 67	62 50	14 48	a
Osage.....	Coal mining.....	26	21.5	21		30	125 00	62 50	62 50	62 50	5 81	a
Sionoga.....	Coal mining.....	45	40	33		30	333 33	166 67	166 67	62 50	8 33	a
Sionoga.....	Coal mining.....	67	64.5	66		32	125 00	62 50	62 50	62 50	1 92	a
Inman.....	Coal mining.....	66	56	41		32	333 33	166 66	166 66	62 50	5 95	a
Toms Creek.....	Coal mining.....	51	41.5	33		32	400 00	200 00	200 00	200 00	9 64	a
Inman.....	Coal mining.....	61	44.5	28		30	45 00	1 00	29 00	15 00	1 01	a
Roda.....	Coal mining.....	46	46	33		18	36 00	1 00	23 00	12 00	1 80	a
Dorchester.....	Coal mining.....	20	19.5	19		30	60 00	1 00	39 00	20 00	3 10	a
Sutherland.....	Coal mining.....	20	19	19		30	60 00	1 00	39 00	20 00	3 10	a
Roaring Fork.....	Coal mining.....	60	40	30		60	60 00	1 00	39 00	20 00	3 10	a
Dunbar.....	Coal mining.....	25	23	23		30	45 00	1 00	29 00	15 00	1 53	a
Josephine.....	Coal mining.....	25	24	22		30	33 00	1 00	21 00	11 00	1 32	a
Sionoga.....	Coal mining.....	38	38	20		24	48 00	1 00	31 00	16 00	1 26	a
Norton.....	Coal mining.....	40	22.5	25		30	60 00	1 00	39 00	20 00	2 82	a
Derby.....	Coal mining.....	22	22	20		18	36 00	1 00	23 00	12 00	1 65	a
Toms Creek.....	Coal mining.....	28	21	16		30	45 00	1 00	29 00	15 00	2 05	a
Toms Creek.....	Coal mining.....	28	24	20		30	42 00	1 00	27 00	14 00	2 75	a
Toms Creek.....	Coal mining.....	24	24	24		30	45 00	1 00	29 00	15 00	1 80	a
Pardie.....	Coal mining.....	50	42.5	38		30	60 00	1 00	11 00	6 00	1 40	a
Totals.....	.....	2,777	.....	.....	7,414	\$15,188 84	\$4,396 79	\$ 6,544 83	\$ 4,247 22	\$ 837 69		

TABLE 66
Trade and industrial education—Part time trade extension classes

CENTER	SCHOOL	SUBJECT	Total Enrol.	Aver. Atten.	Total Cl. Hr.	Total expenses	Federal	State	Local	Per Cap. Cost
Newport News	Apprenticeship	Mechanical drawing	59	51.8	41.5	\$ 1,710.00	\$ 855.00	\$ 145.00	\$ 710.00	\$ 33.01
	Apprenticeship	Physics	59	52.1	41.5	1,800.00	900.00	100.00	800.00	34.54
	Apprenticeship	Shop mathematics	60	52.4	41.5	1,665.00	832.50	167.50	665.00	31.77
Navy yard apprentice	Shop mathematics	100	95.5	86.6	416	2,400.00	1,200.00	400.00	800.00	2.62
	Drafting	Physics . . . . .	.....	.....	.....	.....	.....	.....	.....	.....
		Industrial history . . . . .	.....	.....	.....	.....	.....	.....	.....	.....
		English . . . . .	.....	.....	.....	.....	.....	.....	.....	.....
		Citizenship . . . . .	.....	.....	.....	.....	.....	.....	.....	.....
Totals			278	.....	.....	\$ 7,575.00	\$ 3,787.50	\$ 812.50	\$ 2,975.00	\$ 10.94

Part time general continuation classes

TABLE 67
Trade and industrial education—Teacher training classes

CENTER	SCHOOL	SUBJECT	Total Enrol.	Aver. Enrol.	Aver. Atten.	Total Cl. Hr.	Total Expenses	Federal	State	Local	Per Cap. Cost
Blacksburg	V. P. I.	Trade enrollment course of study	12	12	12	90	\$ 700 00	\$ 350 00	.....	.....	\$ 58 32
Norfolk	Maury High.	Vocational guide methods	32	32	30	60	\$ 1,200 00	600 00	.....	600 00	18 75
Pittsylvania County	Schoolfield	Teacher training	14	14	14	400	400 00	200 00	.....	200 00	28 57
Richmond	John Marshall High.	Teacher training	15	15	15	600	600 00	300 00	.....	300 00	40 00
Newport News	Newport News	Vocational education	7	7	7	300	300 00	150 00	.....	150 00	42 85
Petersburg	Va. N. and I. I.	Trade analyses	21	21	21	1,500	1,500 00	750 00	750 00	.....	71 43
		Methods Industrial history									Colored
		Vocational education, shop management									.....
Wise County	Norton	Coal mining	23	23	23	90	90	.....	.....	.....	.....
Totals			133	133	133	240	\$ 4,700 00	\$ 2,350 00	\$ 750 00	\$ 1,600 00	\$ 259 32

TABLE 68

Number of students completing courses in home economics in various institutions.

	NUMBER COMPLETING THE TWO YEAR COURSE											
	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	Total
Farmville.....	12	1	3	8	14	14	10	14	.....	.....	.....	76
Fredericksburg.....	3	8	8	12	20	14	16	11	6	.....	.....	98
Harrisonburg.....	24	14	26	25	45	54	51	39	23	.....	.....	301
Radford.....	4	13	13	19	18	28	19	25	.....	.....	.....	139
Total.....	43	36	50	64	97	110	96	89	29	.....	.....	614

	NUMBER COMPLETING FOUR YEAR COURSE LEADING TO B. S. DEGREE											
	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	Total
*Farmville.....	2	3	3	5	13
Harrisonburg	6	8	4	5	12	14	9	16	15	15	89
William and Mary.....	2	2	8	5	4	6	6	27
*Radford.....	1	1	.....	5	2	4	4	13
Total.....	6	8	4	8	15	24	22	25	30	142	

*With majors in home economics.

STATEMENT I

Receipts of the public free schools for the year ended June 30, 1927, classified by political divisions and sources

CLASSIFICATION	Amount	Per Ct. Total
Federal aid	\$ 251,883.78	1.07
Vocational education	125,942.89	
Maintenance of agriculture in high schools	93,558.38	
Home economics	24,876.67	
Trades and industries	7,506.84	
State aid	5,531,254.27	23.43
Appropriations of the State general fund	1,799,621.35	
School taxes	3,537,463.18	
Income of State permanent endowment funds	194,169.74	
County funds	4,825,892.90	20.44
Appropriations	144,591.20	
School taxes—current	4,183,530.78	
Delinquent taxes	113,146.49	
Dog licenses	24,830.42	
Capitation taxes	56,240.38	
Tuition fees	67,194.63	
Special appropriations	236,359.00	

STATEMENT I—CONTINUED

CLASSIFICATION	Amount	Per Ct. Total
District funds (exclusive of cities).....	\$ 2,980,895.52	12.62
School taxes	2,886,117.45	
Tuition fees	94,778.07	
City funds	6,360,358.88	26.94
School taxes	5,035,109.17	
Appropriations	747,179.01	
Special appropriations	576,599.83	
Dog taxes	393.87	
Capitation taxes	1,077.00	
Tuition—private sources	296,112.07	1.25
From pupils	296,112.07	
Trust funds	76,008.97	.32
Miscellaneous	76,008.97	
Donations	261,404.86	1.11
Miscellaneous	204,765.56	
Julius Rosenwald Fund	30,825.00	
General Education Board of New York.....	25,814.30	
Proceeds sale of assets, etc.	244,711.13	1.04
Miscellaneous sales and insurance indemnities	244,711.13	
Loan funds	2,781,347.37	11.78
Advances from Literary Fund.....	455,944.27	
Local bond issues	1,119,744.68	
Advances from treasurers.....	232,379.57	
Other borrowings	893,278.85	
Total	\$23,609,869.75	100.00

STATEMENT II

Summary statement of the receipts of the institutions of higher education for the year ended February 28, 1927

SOURCES	Amount	Per Ct. Total
Federal aid	\$ 97,507.66	1.7
State aid—appropriation from general fund.....	1,550,575.54	27.0
Registration and tuition fees	1,428,442.50	25.0
Board and room rent	1,122,682.96	19.5
Donations	408,613.20	7.1
Endowment and trust fund.....	191,384.58	3.3
Borrowings	327,894.22	5.7
Proceeds from sale of property	12,212.87	0.2
Other income	603,640.11	10.5
Total	\$5,742,953.64	100.0

STATEMENT III

Summary statement of the receipts of the public free schools for the year ended June 30, 1927, classified by sources

SOURCE	Amount	Per Ct Total
Taxes dedicated to the support of schools.....	\$15,837,908.74	67.08
State levies	\$3,537,463.18	14.98
County levies	4,377,748.07	18.54
District levies	2,886,117.45	12.23
City levies	5,036,580.04	21.33
Appropriations from general funds.....	3,504,350.39	14.48
State general fund	1,799,621.35	7.62
County funds	380,950.20	1.62
City funds	1,323,778.84	5.60
Tuition fees	458,084.77	1.94
Public funds	161,972.70	.69
Private funds	296,112.07	1.25
Income of permanent endowment funds.....	194,169.74	.82
State Literary Funds.....	194,169.74	.82
Trust funds	76,008.97	.32
Administered by local units.....	76,008.97	.32
Donations	261,404.86	1.11
Proceeds sale of assets, etc.	244,711.13	1.04
Borrowings	2,781,347.37	11.78
Federal aid	251,883.78	1.07
Total	\$23,609,869.75	100.00

STATEMENT IV

Summary statement of combined receipts of elementary and high schools and institutions of higher education

	RECEIPTS		DISTRIBUTION TO ELEMENTARY AND HIGH SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION			
	Amount	Per Ct.of Grand Total	Elementary and High Schools		Institutions of Higher Education	
			Amount	%	Amount	%
Federal aid	\$ 349,391 44	1.1	\$ 251,883 78	72.0	\$ 97,507 66	28.0
Appropriation from general funds.....	5,054,925 93	17.2	3,504,350 39	69.3	1,550,575 54	30.7
Taxes Dedicated to support of schools.....	15,837,908 74	54.1	15,837,908 74	100.0	1,428,442 50	75.7
Registration and tuition fees...	1,886,527 27	6.4	458,084 77	24.3	1,408,613 20	61.0
Board and room rent.....	1,122,682 96	3.8	270,178 71	58.5	1,122,682 96	100.0
Donations.....	670,018 06	2.3	261,404 86	39.0	191,384 58	41.5
Endowment and trust funds...	461,563 29	1.6	2,781,347 37	89.5	327,894 22	10.5
Borrowings.....	3,109,241 59	10.6	244,711 13	95.2	12,212 87	4.8
Proceeds from sale of property..	256,924 00	0.8			603,640 11	100.0
Other income.....	603,640 11	2.1				
Total.....	\$20,252,823 39	100.0	\$23,609,869 75	80.4	\$ 5,742,953 64	19.6

STATEMENT V

Cash resources of the elementary and high schools for the year ended June 30, 1927

Cash receipts of the year as per Statement I.....	\$ 23,609,869.75
Cash balances as of June 30, 1926.....	2,286,438.19
State funds	\$ 78,901.45
County funds	364,419.45
District funds	659,613.77
Loan funds	887,319.70
Other funds	296,183.82
 Total cash revenues	 \$25,896,307.94

STATEMENT VI

Consolidated statement of the disbursements of elementary and high schools and of institutions of higher education, classified by character and functions

CLASSIFICATION	Institutions of Higher Education	Elementary and High Schools	Grand Total	Per Ct. of Total Current Expenses	Per Ct. of Grand Total
Administration.....	\$ 296,772 11	\$ 1,333,867 07	\$ 1,630,639 18	7.11	
Instruction—Regular.....	1,688,232 70	13,713,257 54	15,401,490 24	67.15	
Instruction—Auxiliary agencies.....	227,639 03	173,614 14	401,253 67	1.75	
Operating of coordinating activities.....	1,555,012 86	712,343 93	2,267,356 79	9.88	
Operation of plant.....	238,457 24	1,258,094 74	1,496,551 98	6.53	
Maintenance of plant and equipment.....	363,079 79	728,505 60	1,091,585 39	4.76	
Operation of farm.....	18,442 17	.....	18,442 17	.08	
Debt service	53,056 56	574,383 32	627,439 88	2.74	
Total for current expenses.	\$ 4,440,692 46	\$ 18,494,066 84	\$ 22,934,759 30	100.00	77.59
Capital outlay.....	1,456,645 16	3,319,282 49	4,775,927 65	.....	16.16
Redemption of debt.....	.....	1,847,000 67	1,847,000 67	.....	6.25
Grand total.....	\$ 5,897,337 62	\$ 23,660,350 00	\$ 29,557,687 62	.....	100.00

STATEMENT VII
Government cost payments, classified by major functions

	Education	General Government	Protection to Person and Property	Development and Conservation of Natural Resources	Conservation of Health and Sanitation	Highways	Charities Hospitals and Corrections	Miscellaneous	All Departments
YEAR 1913:									
Total payments...	\$ 3,298,243 00	\$ 782,221 00	\$ 231,293 00	\$ 84,708 00	\$ 115,625 00	\$ 383,188 00	\$ 1,008,398 00	\$ 521,881 00	\$ 6,425,557 00
Per capita cost...	1.57	37	11	0.4	0.5	18	48	25	3 05
% distribution...	51.3	12.2	3.6	1.3	1.8	6.0	15.7	8.1	100.
YEAR 1915:									
Total payments...	3,512,021 00	1,020,365 00	246,685 00	222,443 00	129,561 00	479,321 00	1,209,158 00	763,917 00	7,583,471 00
Per capita cost...	1.63	48	12	10	10	22	56	36	3 58
% distribution...	46.3	13.5	3.3	2.9	1.7	6.3	15.9	10.1	100.
1913 dollar....	3,477,248 00	1,010,262 00	244,242 00	220,242 00	128,280 00	474,575 00	1,197,186 00	756,353 00	7,508,387 00
YEAR 1917:									
Total payments...	3,297,655 00	1,074,551 00	307,607 00	215,152 00	204,114 00	407,334 00	1,418,847 00	772,914 00	7,698,174 00
Per capita cost...	1.51	49	1.4	1	1	19	65	10.0	3 52
% distribution...	42.9	14.0	3.9	2.9	2.7	5.3	18.4	10.0	100.
1913 dollar.....	1,863,082 00	607,091 00	173,789 00	121,555 00	115,319 00	230,132 00	801,608 00	436,675 00	4,319,251 00
YEAR 1919:									
Total payments...	3,861,289 00	1,127,722 00	403,789 00	304,943 00	250,550 00	778,619 00	1,793,701 00	946,599 00	9,467,212 00
Per capita cost...	1.73	51	1.6	13	11	35	89	42	4 25
% distribution...	40.8	11.9	4.3	3.2	2.6	8.2	18.9	10.0	100.
1913 dollar.....	1,874,412 00	547,438 00	196,014 00	148,031 00	121,627 00	377,971 00	870,739 00	459,512 00	4,595,734 00
YEAR 1922:									
Total payments...	8,880,194 00	2,000,504 00	647,966 00	743,521 00	847,164 00	2,319,230 00	2,476,583 00	1,077,938 00	18,913,094 00
Per capita cost...	3.72	85	27	31	36	98	105	46	7 99
% distribution...	46.6	10.6	3.4	3.9	4.5	12.3	13.1	5.7	100.
1913 dollar....	5,906,170 00	1,342,620 00	434,872 00	499,009 00	568,566 00	1,556,530 00	1,662,136 00	723,449 00	12,683,332 00
YEAR 1923:									
Total payments...	7,963,673 00	1,711,557 00	785,143 00	938,766 00	678,589 00	4,666,115 00	2,630,790 00	1,311,877 00	20,686,510 00
Per capita cost...	3.33	72	32	39	28	95	1.1	55	8 65
% distribution...	38.5	8.3	3.8	4.5	3.3	22.6	12.7	6.3	100.
1913 dollar.....	5,171,210 00	1,111,401 00	569,033 00	609,588 00	440,642 00	3,029,945 00	1,708,305 00	851,868 00	13,432,739 00
YEAR 1924:									
Total payments...	8,572,377 00	1,729,878 00	883,156 00	836,365 00	766,534 00	4,383,338 00	2,661,088 00	1,231,695 00	21,064,431 00
Per capita cost...	3.55	72	37	35	31	1.81	1.10	51	8 71
% distribution...	40.7	8.2	4.2	4.0	3.6	20.9	12.6	5.8	100.
1913 dollar....	5,714,918 00	1,153,252 00	588,770 00	557,577 00	511,023 00	2,922,225 00	1,774,059 00	2,453 00	13,224,277 00
YEAR 1925:									
Total payments...	8,774,947 00	1,822,882 00	933,970 00	914,189 00	848,888 00	2,492,685 00	2,643,533 00	1,244,666 00	19,675,760 00
Per capita cost...	3.60	75	38	37	35	1.02	1.08	51	8 07
% distribution...	44.6	9.3	4.6	4.6	4.4	12.7	13.4	6.3	100.
1913 dollar....	5,518,835 00	1,146,466 00	587,403 00	574,901 00	533,892 00	1,567,726 00	1,662,589 00	782,809 00	12,374,691 00
YEAR 1926:									
Total payments...	8,861,121 00	2,210,170 00	976,424 00	934,598 00	714,501 00	3,438,206 00	3,072,360 00	1,276,669 00	21,473,419 00
Per capita cost...	3.54	88	39	37	29	1.37	1.23	51	8 58
% distribution...	41.3	10.3	4.6	4.3	3.3	16.0	14.3	10.0	100.
1913 dollar....	5,791,533 00	1,444,556 00	638,165 00	610,848 00	466,994 00	2,240,655 00	2,008,078 00	834,032 00	14,034,914 00

STATEMENT VIII

Consolidated statement of the disbursements of the elementary and high schools, classified by character and by functions, for the year ended June 30, 1927

CLASSIFICATION	Amount	Per Ct. of Total Current Expenses	Per Ct. of Grand Total
Administration.....	\$ 1,333,867 07	7.21	.....
Instruction—Regular.....	13,713,257 54	74.15	.....
Instruction—Auxiliary agencies.....	173,614 64	.94	.....
Operation of coordinating activities.....	712,343 93	3.85	.....
Operation of plant.....	1,258,094 74	6.80	.....
Maintenance of plant and equipment.....	728,505 60	3.94	.....
Debt service.....	574,383 32	3.11	.....
Total for current expenses.....	\$ 18,494,066 84	100.00	78.16
Capital outlay.....	3,319,282 49	.....	14.03
Redemption of debt.....	1,847,000 67	.....	7.81
Grand total.....	\$ 23,660,350 00		100.00

STATEMENT IX

Division of disbursements for current expenses between elementary and high schools for the year ended June 30, 1927

CLASSIFICATION	Elementary Schools	High Schools
Administration.....	\$ 910,631 05	\$ 423,236 02
Instruction—Regular.....	9,363,411 88	4,349,845 66
Instruction—Auxiliary agencies.....	118,544 08	55,070 56
Operation of coordinating activities.....	480,388 44	225,955 49
Operation of plant.....	858,901 28	399,193 46
Maintenance of plant and equipment.....	497,423 62	231,081 98
Debt service interest payments.....	392,188 93	182,194 39
Total.....	\$ 12,627,489 28	\$ 5,866,577 56

STATEMENT X

Division of total disbursements between elementary and high schools for the year ended June 30, 1927, and institutions of higher education for the year ended February 28, 1927.

CLASSIFICATION	ELEMENTARY AND HIGH SCHOOLS		INSTITUTIONS OF HIGHER EDUCATION	
	Amount	Per Cent of Total	Amount	Per Cent of Total
Administration.....	\$ 1,333,867 07	5.64	\$ 296,772 11	5.03
Instruction—Regular.....	13,713,257 54	57.96	1,688,232 70	28.63
Instruction—Auxiliary agencies.....	173,614 14	.73	227,639 03	3.86
Operation of coordinating activities.....	712,343 93	3.01	1,555,012 86	26.37
Operation of plant.....	1,258,094 74	5.32	238,457 24	4.04
Maintenance of plant and equipment.....	728,505 60	3.08	363,079 79	6.16
Operation of farm.....	574,383 32	2.42	18,442 17	.31
Debt service.....	.....	.....	53,056 56	.90
Capital outlay.....	3,319,282 49	14.03	1,456,645 16	24.70
Redemption of debt.....	1,847,000 67	7.86	.....	.....
Total.....	\$ 23,660,350 00	100.00	\$ 5,897,337 62	100.00

STATEMENT XI

Statement of the disbursements of elementary and high schools by cities and counties, classified by character; showing per pupil cost of current expenses for the year ended June 30, 1927

CITIES:	Current Expenses Exclusive of Interest	Interest	Total Disbursements for Current Expenses	Average Daily Attendance	Per Pupil Cost of Current Expenses	Capital Outlay	Payments on Debt	Grand Total Disbursements
Alexandria.....	\$ 132,126 16	\$ 11,695 00	\$ 132,126 46	2,668	\$ 50 66	\$ 552 78	\$ 2,000 00	\$ 132,679 24
Bristol.....	75,623 60		87,318 60	1,558	56 05	7,969 54		97,288 14
Buena Vista.....	26,821 26		26,821 26	130	35 34	752 40		27,573 66
Charlottesville.....	130,184 58		130,184 58	2,713	47 99	9,208 13		139,392 71
Clifton Forge.....	32,454 74		52,454 74	1,310	40 04	81 21		52,535 95
Danville.....	196,533 09		196,533 09	3,651	53 88	306,853 54		503,386 63
Friedricksburg.....	45,766 47		6,860 00	52,626 47	1,027	51 24	4,707 62	57,424 09
Hampton.....	71,508 74		13,086 88	84,505 62	1,095	77 26	234 56	100,738 18
Harrisonburg.....	70,902 87		70,902 87	1,372	51 68	1,254 82		72,137 69
Hopewell.....	78,499 23		78,499 23	1,630	48 16	13,949 07		92,448 30
Lynchburg.....	404,918 78		404,918 78	7,111	56 94	25,610 95		433,996 67
Newport News.....	336,466 52	60 00	336,466 52	5,114	65 80	1,834 59		338,361 11
Norfolk.....	1,381,110 73		1,381,110 73	20,079	67 83	356,217 65		1,737,328 38
Petersburg.....	280,102 78		280,102 78	4,903	57 13	2,176 02		282,278 80
Portsmouth.....	409,712 71		409,712 71	7,739	52 94	28,614 11		438,326 82
Radford.....	39,669 04		39,669 04	1,192	33 28		52,700 00	40 196 04
Richmond.....	2,071,079 65		2,078,862 19	28,463	73 04	268,036 23		2,346,908 42
Roanoke.....	615,176 10		615,176 10	12,067	59 80	28,831 10		644,007 20
Staunton.....	75,355 07		75,355 07	1,522	49 56	137,322 71		212,757 78
South Norfolk.....	59,564 58		59,564 58	1,389	42 88		2,000 00	59,564 58
Suffolk.....	90,567 28		1,060 00	91,627 28	1,820	50 32	3,377 65	97,004 93
Waynesboro.....	35,564 94		1,698 50	37,263 44	873	42 68	2,463 33	39,680 27
Williamsburg.....	38,022 24		171 88	28,194 12	446	63 22	93 78	33,444 73
Winchester.....	139,920 09	965 81	140,885 90	1,483	95 00	8,179 98		149,065 88
All cities.....	\$ 6,847,731 55	\$ 43,380 61	\$ 6,891,112 16	111,924	\$ 61 57	\$ 1,205,951 94	\$ 31,502 10	\$ 8,128,566 20

STATEMENT XI—CONTINUED

COUNTIES:	Current Expenses Exclusive of Interest	Interest	Total Disbursements for Current Expenses	Average Daily Attendance	Per Pupil Cost of Current Expenses	Capital Outlay	Payments on Debt	Grand Total Disbursements
Aeconmac.....	\$ 222,714 12	\$ 10,697 54	\$ 233,411 60	5,558	\$ 41 99	\$ 17,225 32	\$ 11,269 23	\$ 25,193 21
Albemarle.....	189,187 69	5,412 31	194,600 00	5,664	31 36	4,614 23	53,771 92	252,986 15
Allegany.....	124,386 63	11,068 39	135,465 02	3,192	42 44	15,552 52	38,800 11	189,857 65
Anne Arundel.....	113,710 33	7,96 20	125,709 50	6,113	35 90	3,338 27	17,543 87	130,082 23
Amherst.....	102,358 94	3,223 96	105,582 90	3,311	31 89	5,018 65	19,480 68	74,089 71
Appomattox.....	69,457 89	440 15	70,398 04	1,612	43 67	821 14	2,840 53	548,365 00
Arlington.....	251,112 96	60,257 51	311,370 47	4,103	75 89	81,514 84	155,500 00	325,150 38
Augusta.....	232,760 67	11,257 57	244,018 24	5,002	47 78	10,833 42	70,278 72	125,034 83
Bath.....	61,637 04	2,733 22	64,420 26	6,221	52 76	6,633 45	1,921 12	5,905 26
Bedford.....	185,222 41	548 89*	185,771 50	4,986	37 27	32,115 92	223,792 48	223,792 48
Bland.....	34,514 53	.....	34,514 53	1,010	34 17	.....	3,728 92	38,243 45
Botetourt.....	112,365 65	13,135 29	125,730 94	3,975	42 27	75,821 12	22,439 06	223,991 15
Brunswick.....	128,192 58	3,869 48	132,062 06	3,868	34 14	671 10	13,128 46	145,861 62
Buchanan.....	89,876 35	.....	89,876 35	4,693	19 16	88,028 84	.....	177,905 19
Buckingham.....	74,084 78	2,134 99	76,219 77	2,563	29 74	2,150 33	.....	53,927 89
Campbell.....	60,787 55	3,062 99	163,850 50	3,808	43 03	91,572 56	132,277 99	265,049 16
Caroline.....	97,636 93	1,10 10	98,747 03	2,860	34 53	9,495 84	5,029 23	105,742 10
Carroll.....	89,057 85	393 85	89,451 60	2,576	19 56	44,892 66	.....	134,314 26
Charles City.....	38,328 52	453 12	38,781 64	1,108	34 64	8,069 10	2,591 21	49,441 95
Charlotte.....	107,834 62	6,825 52	114,680 44	2,817	40 71	26,69	52,937 74	167,644 57
Chesterfield.....	184,493 76	6,904 00	191,397 76	4,254	44 99	31,701 74	4,336 79	227,438 09
Clarke.....	46,130 25	133 00	46,284 00	1,212	38 19	1,286 86	1,759 29	65,930 15
Craig.....	2,132 09	2,132 09	28,242 16	729	38 74	35,292 76	5,766 33	69,307 25
Culpeper.....	106,851 63	1,463 88	108,255 51	2,390	45 30	10,001 87	119,212 38	262,327 87
Cumberland.....	48,101 57	660 57	48,792 14	1,603	30 34	13,835 17	15,506 17	184,651 87
Dickenson.....	98,185 82	1,462 34	99,618 16	3,211	31 03	5,583 52	7,614 03	63,261 04
Dinwiddie.....	131,632 81	6,411 67	138,014 48	2,960	46 64	4,445 86	2,981 26	52,786 55
Elizabeth City.....	124,886 96	25,094 22	149,981 18	2,692	55 71	500 00	26,492 84	151,116 21
Essex.....	43,110 73	419 62	43,530 35	1,210	35 98	1,568 87	112,819 79	263,330 97
Fairfax.....	197,310 66	2,002 82*	199,322 48	3,556	45 44	63,447 33	6,307 73	51,406 95
Fauquier.....	163,533 29	1,101 57	164,694 78	3,620	45 50	4,455 72	15,520 97	26,327 87
Floyd.....	45,184 32	1,620 00	56,774 32	4,214	13 16	.....	6,489 72	44,261 04
Fluvanna.....	47,168 86	420 90	47,588 86	1,284	37 06	2,216 43	2,981 26	44,261 04
Franklin.....	114,175 63	2,659 86	116,235 49	4,719	24 63	8,387 88	26,492 84	151,116 21
Frederick.....	73,835 41	1,556 50	75,371 91	1,737	43 39	7,532 64	16,780 67	98,732 60
Giles.....	121,534 21	4,765 25	126,289 66	3,028	41 71	31,232 16	174,229 49	174,229 49
Gloucester.....	652,956 38	1,187 15	74,143 53	3,033	24 41	1,048 65	6,296 82	81,389 00
Goochland.....	56,840 91	652 46	57,493 46	1,494	38 48	5,135 20	8,448 00	71,076 75
Grayson.....	113,237 32	360 00	113,597 32	3,638	31 24	4,817 96	18,455 09	136,870 37

Greene.....	774	38	33 250 79	927	1,280 33	2,296 34	36 828 06	
Greenville	166	99	71 631 98	1,982	2 641 56	11 266 65	85 540 19	
Halifax	1,258	85	227 102 11	9,286	22 023 12	249 732 57		
Hanover.....	1,667	39	108 993 95	3,049	35 75	31 427 97	145 190 97	
Henrico.....	201,048	44	222 844 42	4,396	51 87	270 375 04	17,772 78	
Henry.....	130,271	86	130 271 96	3,998	32 58	42,659 59	177 819 96	
Highland.....	38,608	50	2,328 98	40 937 48	852 05	433 79	56 217 75	
Isle of Wight.....	100,368	69	6,989 62	107 078 31	2,387	44 86	11,080 79	
James City.....	36,772	69	1,293 86	38,066 55	622	61 20	13 290 16	
King and Queen.....	43,532	68	344 37	43 877 65	1,612	27 22	1,334 12	
King George.....	24,616	96	1,059 88	6,676 84	59,586 40	1,581	25 75	
King William.....	56,511	10	3,075 10	59 586 40	1,581	37 69	2,340 50	
Lancaster.....	52,715	70	34 74	52,750 44	1,629	32 38	1,63 20	
Loudoun.....	129,278	46	10,609 32	139,887 78	5,005	27 95	39,856 92	
Middlesex.....	160,992	02	6,933 87	167 625 89	3,267	51 40	10,168 40	
Montgomery.....	823	08	823 26	85,892 26	1,931	29 30	54,437 33	
Nassau.....	98,612	01	9,066 42	107 678 43	2,656	40 54	43,557 14	
Lenoir.....	52,076	09	912 87	52 989 06	1,479	35 83	2,789 48	
Madison.....	46,331	60	433 42	46 835 02	1,439	32 55	4,475 27	
Matthews.....	190,715	73	2,784 39	193 200 12	5,644	34 28	11,344 91	
Mecklenburg.....	46,807	24	392 71	47,199 95	1,464	32 24	11,506 97	
Middlesex.....	103,178	25	4,408 74	107 586 99	3,015	32 24	2,856 71	
Montgomery.....	16,833	50	177 764 83	4,104	43 32	1,223 00	35 739 11	
Nansemond.....	99,063	90	99,503 90	2,356	36 09	68,180 49	19,955 13	
Nelson.....	32,791	92	143 39	32 935 31	817	40 31	2,842 55	103,252 13
New Kent.....	238,564	13	40 83	279,068 96	5,037	56 40	4,784 49	4,546 36
Norfolk.....	135,206	91	11,259 61	146 465 92	3,039	48 20	111 05 96	37,960 16
Northampton.....	67,848	21	11,624 60	68,472 21	2,189	31 28	40 539 22	46,490 42
Northumberland.....	126,634	95	11,266 88	137,891 83	2,448	46 77	16,127 52	10,933 00
Orange.....	91,690	66	1,649 77	93,340 63	2,130	43 82	13,439 19	117 622 82
Patrick.....	85,293	73	1,462 66	86,756 39	2,313	26 19	0,070 73	21,350 45
Pittsylvania.....	76,126	59	2,101 07	78,227 66	5,861	13 35	13,238 46	109,117 57
Powhatan.....	371,952	34	4,943 40	376,895 74	13,724	27 46	48,458 35	10,117 57
Rappahannock.....	46,162	84	33,875 49	949	35 70	27 443 54	452 777 63
Richmond.....	93,333	92	10,559 04	108,892 96	2,332	46 70	5,082 61	39,969 53
Roanoke.....	89,472	01	3,070 40	92,542 41	1,748	52 94	125 427 79	245 289 76
Rockbridge.....	108,722	34	108,722 34	2,186	49 74	1,573 56	102 966 83
Rockingham.....	113,043	60	9,282 60	122,326 20	3,277	41 73	83 082 75	8,806 32
Russell.....	156,012	32	226 00	1,181	37 33	56,712 57	150 836 58
Spotsylvania.....	33,951	22	6,814 64	202 298 71	5,239	51 37	4,035 09	5,910 38
Tidewater.....	143,884	38	3,049 30	146,883 68	3,469	42 34	4,336 13	8,543 23
Williamsburg.....	208,274	16	4,700 91	212,975 07	5,414	39 34	35,806 70	61,964 95
Wise.....	15,759	82	171,782 14	5,244	32 76	41,666 56	73,557 96

STATEMENT XI—CONTINUED

	Current Expenses Exclusive of Interest	Interest	Total Disbursements for Current Expenses	Average Daily Attendance	Per Pupil Cost of Current Expenses	Capital Outlay	Payments on Debt	Grand Total Disbursements
Scott.....	\$ 98,761 12	\$ 5,137 41	\$ 103,898 53	8,986	\$ 11.56	\$ 22,676 13	\$ 21,743 65	\$ 148,138 31
Shenandoah.....	118,733 40	3,381 98	122,175 38	3,725	32.80	563 10	12,405 70	135,174 18
Shayt.....	145,332 77	1,515 03	146,877 80	4,748	30.93	639 80	16,533 00	190,450 60
Southampton.....	169,663 87	8,808 57	178,477 44	4,350	41.03	37,636 44	34,175 54	250,199 42
Spotsylvania.....	365 16	61,933 20	1,812	34.21	1,923 73	914 33	64,822 26	
Stafford.....	61,618 04	61,618 04	61,706 96	1,361	27.24	1,930 99	3,246 66	
Suffolk.....	36,705 56	371 40	37,076 96	1,724	34.40	886 31	2,357 00	
Surry.....	56,877 41	2,422 59	59,300 00	1,724	34.40	866 31	62,543 31	
Sussex.....	99,105 14	5,902 51	105,007 65	2,201	47.71	4,605 22	16,980 93	126,593 80
Tazewell.....	211,553 84	1,129 45	212,683 29	5,622	37.83	13,827 41	13,494 15	
Warren.....	53,989 39	.....	53,989 39	1,383	39.04	11,500 33	2,014 44	67,504 16
Warwick.....	70,800 65	.....	70,800 65	1,135	62.38	13,591 00	1,333 15	72,734 80
Washington.....	265,637 52	17,268 26	282,995 78	5,929	47.22	13,431 07	68,076 35	364,413 20
Westmoreland.....	48,068 12	608 97	48,677 09	2,497	14.49	1,821 58	3,791 91	54,290 58
Wise.....	366,311 22	56,345 04	422,656 26	10,953	38.59	81,549 75	19,000 00	523,206 01
Wythe.....	132,027 98	3,632 81	135,650 79	3,493	38.84	71,676 65	8,784 01	216,111 45
York.....	41,765 41	845 03	48,610 44	1,256	38.70	694 44	5,978 10	55,282 98
All counties.....	\$ 11,071,951 97	\$ 531,002 71	\$ 11,602,954 68	312,926	\$ 37.08	\$ 2,113,330 55	\$ 1,815,498 57	\$ 15,531,783 80
All cities.....	6,847,731 55	43,380 61	6,891,112 16	111,924	61.57	1,205,951 94	\$ 31,502 10	8,128,566 20
Counties and cities.....	\$ 17,919,083 52	\$ 574,383 32	\$ 18,494,066 84	424,850	\$ 43.53	\$ 3,319,292 49	\$ 1,847,000 67	\$ 23,660,350 00

STATEMENT XII

Statement of the disbursements of William and Mary College for the year ended February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 29,561.71
Salaries	<u>\$ 29,561.71</u>
Contractual services	16,581.25
Traveling	2,009.31
Communication	2,764.41
Printing	4,885.24
Other expenses	<u>6,922.29</u>
Supplies	2,238.38
Office supplies	<u>2,238.38</u>
Equipment	1,509.93
Office equipment	<u>1,509.93</u>
Total administration	<u>\$ 49,891.27</u>
Instruction.	
Arts, Sciences, and Teaching:	
Personal service	\$138,756.95
Salaries	<u>\$138,756.95</u>
Contractual services	13,294.87
General repairs	4,859.87
Other expenses—Practice teaching	<u>8,435.00</u>
Supplies	13,728.88
Educational supplies	<u>13,728.88</u>
Equipment	3,355.73
Educational equipment	<u>3,355.73</u>
Total arts, sciences, and teaching	<u>\$169,136.43</u>
Extension Courses:	
Personal service	\$ 22,300.00
Salaries	<u>\$ 22,300.00</u>
Contractual services	9,122.06
Traveling	8,122.06
Printing	<u>1,000.00</u>
Equipment	3,226.36
Educational equipment	<u>3,226.36</u>
Total extension courses	<u>\$ 34,648.42</u>
Summer School:	
Personal service	\$ 32,248.37
Salaries	<u>\$ 32,248.37</u>

STATEMENT XII—CONTINUED

Contractual services	\$ 1,559.96
Communication	391.18
Printing	1,168.78
 Supplies	 16,985.40
Food	14,454.57
Educational and recreational	2,530.83
 Total summer school	 \$ 50,793.63
 Total instruction	 \$254,578.48
 Operation of Auxiliary Agencies.	
Library:	
Personal service	\$ 7,936.83
Salaries	
Contractual services	1,519.20
Communication	12.38
Printing	1,506.82
 Supplies	 1,287.70
Office supplies	
 Total operation of auxiliary agencies.....	 \$ 10,743.73
 Operation of Coordinating Activities.	
Maintenance of students and employees:	
Personal service	\$ 33,169.92
Salaries	
Contractual services	7,853.72
General repairs	2,035.97
Transportation	1,869.64
Other expenses—laundry	3,948.11
 Supplies	 120,502.07
Food	108,476.77
Fuel	2,974.92
Medical and laboratory	965.42
Laundry, cleaning, and disinfectant	1,990.00
Other supplies	6,094.96
 Total operation of coordinating activities.....	 \$161,525.71
 Operation of Plant:	
Personal service	\$ 12,446.14
Salaries	
Contractual services	7,350.00
General repairs	
Supplies	27,833.00
Fuel	

STATEMENT XII—CONTINUED

Equipment	\$ 6,959.97
Other equipment—Electric lamps, etc... \$ 6,959.97	
Total operation of plant.....	\$ 47,974.11
Maintenance of Plant and Equipment:	
Personal service	\$ 14,693.08
Salaries	\$ 14,693.08
Contractual services	16,056.26
General repairs	16,056.26
Supplies	2,020.19
Agricultural and botanical	2,020.19
Materials	3,000.00
Building materials	3,000.00
Fixed charges	8,929.86
Fire insurance	2,429.86
Rent	6,500.00
Total maintenance of plant and equipment.....	\$ 44,699.39
Capital Outlay:	
New structures	\$ 482,538.09
Equipment	46,410.04
Household	\$ 32,265.75
Educational and recreational	14,144.29
Total capital outlay.....	\$ 528,948.13
Debt Service:	
Interest	\$ 15,994.91
Current loans	\$ 14,083.80
Sinking fund installments	1,911.11
Total debt service	\$ 15,994.91
Total disbursements	\$ 1,114,355.73
Summary	
Total administration	\$ 49,891.27
Total instruction	254,578.48
Total operation of auxiliary agencies	10,743.73
Total operation of coordinating activities	161,525.71
Total operation of plant	47,974.11
Total maintenance of plant and equipment	44,699.39
Total capital outlay	528,948.13
Total debt service	15,994.91
Total disbursements	\$ 1,114,355.73

STATEMENT XIII

Statement of the disbursements of the University of Virginia for the year ending February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 41,973.05
Salaries	\$ 41,466.42
Wages	506.63
Contractual services	19,097.92
Traveling	4,116.86
Communication	2,428.88
Printing	4,597.96
Other expenses	7,954.22
Supplies	2,362.70
Office supplies	2,362.70
Fixed charges	650.00
Insurance	150.00
Contributions	500.00
Total administration	<u>\$ 64,083.67</u>
Instruction—Regular.	
College and Graduate Department:	
Personal service	\$251,498.21
Salaries and wages	\$251,498.21
Contractual services	6,625.82
General repairs	1,863.33
Light, heat, power, and water	629.82
Traveling	253.77
Transportation	658.84
Communication	335.63
Printing	2,215.27
Other expenses	669.26
Supplies	12,695.49
Fuel	144.93
Office supplies	1,055.06
Medical and laboratory	10,059.01
Laundry, cleaning, and disinfectant	467.47
Other supplies	969.02
Total college and graduate department.....	<u>\$270,819.52</u>
Medicine:	
Personal service	\$ 93,580.44
Salaries	\$ 92,380.49
Wages	1,199.95

STATEMENT XIII—CONTINUED

Contractual services		1,772.19
General repairs	\$ 182.51	
Light, heat, power, and water	204.85	
Traveling	246.70	
Transportation	661.61	
Other expenses	476.52	
Supplies		9,401.27
Office supplies	427.54	
Medical and laboratory supplies	7,503.25	
Laundry, cleaning, and disinfectant ..	82.98	
Other supplies	1,387.50	
Total medicine		\$104,753.90
Engineering:		
Personal service		\$ 29,850.63
Salaries		
Contractual services		1,065.40
General repairs	297.65	
Light, heat, power, and water	237.81	
Traveling	73.64	
Transportation	89.20	
Communication	56.35	
Printing	274.75	
Other expenses	36.00	
Supplies		2,508.01
Office supplies	26.45	
Medical and laboratory supplies	1,409.36	
Other supplies	1,072.20	
Total engineering		\$ 33,424.04
Education:		
Personal service		\$ 17,000.64
Salaries		
Contractual services		409.34
Traveling	263.18	
Transportation	3.99	
Other expenses	142.17	
Supplies		663.79
Medical and laboratory supplies	663.79	
Total education		\$ 18,073.77
Law:		
Personal service		\$ 34,432.11
Salaries		
Contractual services		421.12
Traveling	104.98	
Transportation	18.47	
Communication	119.40	
Printing	24.37	

STATEMENT XIII—CONTINUED

Other expenses	\$ 153.90
Supplies	\$ 144.00
Office supplies	144.00
Total law	<u>\$ 34,997.23</u>
Total instruction—Regular	<u>\$462,068.46</u>
<hr/>	
Instruction—Auxiliary Agencies.	
Physical training:	
Personal service	\$ 11,743.65
Salaries	11,743.65
Contractual services	92.05
General repairs	12.65
Light, heat, power, and water	55.41
Communication	23.99
Supplies	11.55
Office supplies	11.55
Total physical training	<u>\$ 11847.25</u>
<hr/>	
Summer Quarter:	
Personal service	\$ 77,487.70
Salaries	77,487.70
Contractual services	4,086.30
Traveling	528.78
Transportation	107.50
Communication	344.25
Printing	2,006.77
Other expenses	1,099.00
Supplies	3,488.64
Office supplies	545.64
Medical and laboratory supplies	2,451.34
Laundry, cleaning, and disinfectant....	49.24
Other supplies	442.42
Total summer quarter	<u>\$ 85,062.64</u>
<hr/>	
Extension School:	
Personal service	\$ 28,384.62
Salaries	\$15,404.20
Wages	472.51
Special payments	12,507.91
Contractual services	11,244.64
Traveling	5,396.12
Transportation	35.60
Communication	864.20
Printing	4,679.91
Other expenses	268.81

STATEMENT XIII—CONTINUED

Supplies		\$ 2,261.90
Medical and laboratory supplies.....	\$ 777.27	
Educational and recreational supplies	1,107.61	
Motor vehicle supplies	351.77	
Other supplies	25.25	
Fixed charges		100.35
Insurance	100.35	
Total extension school		\$ 41,991.51
Research in Social Science:		
Personal service		\$ 4,472.50
Salaries	\$ 4,472.50	
Contractual services		1,038.99
Traveling	815.93	
Transportation	58.15	
Communication	164.91	
Supplies		324.63
Medical and laboratory supplies	324.63	
Total research in social science.....		\$ 5,836.12
Total instruction—Auxiliary agencies.....		\$144,737.52
Total instruction		\$606,805.98
Operation of Coordinating Activities:		
Library:		
Personal service		\$ 11,251.43
Salaries	\$11,251.43	
Contractual services		1,095.00
Communication	111.66	
Printing	137.69	
Other expenses	845.65	
Supplies		182.99
Office supplies	182.99	
Total library		\$ 12,529.42
Hospital:		
Personal service		\$ 93,432.41
Salaries	\$93,432.41	
Contractual services		12,380.76
General repairs	2,194.12	
Motor vehicle repairs	155.85	
Light, heat, power, and water	5,060.25	
Traveling	135.10	
Communication	2,171.63	
Printing	2,251.05	
Other expenses	412.76	

STATEMENT XIII—CONTINUED

Supplies	\$ 113,243.47
Food supplies	\$ 74,257.54
Fuel supplies	2,121.77
Office supplies	2,224.41
Medical and laboratory supplies	27,731.45
Laundry, cleaning, and disinfectant ..	3,515.28
Refrigerating	33.96
Educational and recreational supplies ..	1,177.51
Motor vehicle supplies	811.48
Wearing apparel	32.05
Other supplies	1,338.02
Materials	1,997.09
Building material	1,997.09
Fixed charges	4,589.68
Rent	4,400.00
Insurance	189.68
Total hospital	\$225,643.41
Cafeteria:	
Personal service	\$ 15,841.88
Salaries	\$ 4,400.00
Wages	11,441.88
Contractual services	1,701.08
General repairs	400.22
Light, heat, power, and water	828.82
Traveling	49.29
Communication	75.41
Other expenses	347.34
Supplies	33,319.29
Food supplies	31,917.52
Fuel supplies	781.16
Office supplies	74.05
Laundry, cleaning, and disinfectant ..	409.59
Refrigerating	61.00
Other supplies	75.97
Materials .....	.65
Building materials .....	.65
Total cafeteria	\$ 50,862.90
Laundry:	
Personal service	\$ 8,885.98
Salaries	\$ 2,340.00
Wages	6,545.98
Contractual services	2,414.66
General repairs .....	.685.78
Light, heat, power, and water	1,725.61
Other expenses	3.27

STATEMENT XIII—CONTINUED

Lectures and Entertainment:

Supplies	\$	3,480.86
Fuel	\$	1,730.59
Laundry, cleaning, and disinfectant.....	\$	816.88
Other supplies	\$	933.39
Total laundry	\$	14,781.50
Personal service	\$	8,063.00
Salaries	\$	400.00
Wages	\$	75.00
Special payments	\$	7,588.00
Contractual services		291.76
Printing		50.00
Other expenses		85.08
General repairs		136.68
Total lectures and entertainment.....	\$	8,354.76

Publicity and Publications:

Personal service	\$	3,439.00
Contractual services		3,196.93
Traveling		21.20
Communication		48.25
Printing		559.90
Other expenses		2,567.58
Supplies		18.74
Office supplies		18.74
Fixed charges		1,250.00
Contributions		1,250.00
Total publicity and publications	\$	7,904.67
Total operation of coordinating activities.....	\$	320,076.66

Operation of Plant:

Personal service	\$	7,597.92
Salaries	\$	1,250.00
Wages	\$	6,347.92
Contractual services		3,158.12
Sundry expenses		3,158.12
Supplies		31,720.72
Fuel		26,705.86
Other supplies		5,014.86
Materials		30.56
Building materials		30.56
Total operation of plant	\$	42,507.32

STATEMENT XIII—CONTINUED

Maintenance of Plant and Equipment:

Personal service	\$ 39,856.58
Salaries	16,048.00
Wages	23,808.58
Contractual services	13,550.68
General repairs	2,500.00
Motor vehicle repairs	92.86
Light, heat, power, and water	8,123.62
Printing	2,834.20
Supplies	4,587.89
Forage and veterinary supplies.....	533.96
Laundry, cleaning, and disinfectant....	1,380.39
Agricultural and botanical supplies....	477.00
Motor vehicle supplies.....	541.18
Other supplies	1,655.36
Materials	7,226.55
Highway materials	589.10
Building materials	5,687.34
Sewer and water materials	950.11
Fixed charges	6,664.77
Rent	2,706.65
Insurance	3,958.12
Total maintenance of plant and equipment.....	\$ 71,886.47
Grants and Donations:	
Contributions	\$ 23,903.81
Total grants and donations.....	\$ 23,903.81
Providing Annuities:	
Pensions	\$ 20,615.03
Carnegie retirement	\$ 18,365.00
Parrish annuity	2,250.00
Total providing annuities	\$ 20,615.03
Debt Service:	
Interest	\$ 14,474.17
Total debt service	\$ 14,474.17
Capital Outlays:	
Structures	\$ 3,045.66
Equipment	40,696.19
Office equipment	\$ 3,859.78
Household equipment	6,300.33
Medical and laboratory equipment...	16,541.99
Educational and recreational equip- ment	1,646.12
Motor vehicle equipment	1,131.90
Other equipment	11,216.07
Total capital outlays	\$ 43,741.85
Total disbursements	\$ 1,208,094.96

STATEMENT XIII—CONTINUED

Summary

Total administration	\$ 64,083.67
Total instruction—Regular	462,068.46
Total instruction—Auxiliary agencies	144,737.52
Total operation of coordinating activities	320,076.66
Total operation of plant	42,507.32
Total maintenance of plant and equipment	71,886.47
Total grants and donations	23,903.81
Total providing annuities	20,615.03
Total debt service	14,474.17
Total capital outlays	43,741.85
	<hr/>
	\$1,208,094.96

STATEMENT XIV

Statement of the disbursements of the Virginia Agricultural and Mechanical College and Polytechnic Institute for the year ending February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 24,428.09
Salaries	23,605.04
Wages	609.55
Special payments	213.50
Contractual services	6,084.31
Traveling	2,218.87
Transportation	94.15
Communication	1,280.59
Other expenses	2,490.70
Supplies	1,836.45
Fuel	367.61
Office supplies	759.03
Laundry, cleaning, and disinfectant....	8.00
Other supplies	701.81
Total administration	\$ 32,348.85
Instruction—Regular.	
Agriculture:	
Personal service	\$ 51,090.79
Salaries	48,800.03
Wages	2,225.72
Special payments	65.04

STATEMENT XIV—CONTINUED

Contractual services	\$ 1,923.43
General repairs	93.49
Motor vehicle repairs.....	15.43
Light, heat, power, and water	40.29
Traveling	380.38
Transportation	685.57
Communication	219.34
Other expenses	188.93
 Supplies	 6,458.34
Food supplies	913.33
Forage and veterinary supplies.....	2,839.70
Fuel	1,243.02
Office supplies	17.11
Medical and laboratory supplies.....	763.85
Laundry, cleaning, and disinfectant...	22.34
Refrigerating supplies	28.00
Agricultural and botanical	81.70
Motor vehicle supplies	115.13
Other supplies	434.16
 Materials	 419.02
Highway materials	7.00
Building materials	367.52
Sewer and water materials	1.00
Other materials	43.50
 Total agriculture	 \$ 59,891.58
 Teacher Training in Agriculture:	
Personal service	\$ 11,053.64
Salaries	\$ 11,037.74
Wages	15.90
 Contractual services	 1,601.70
General repairs	13.55
Motor vehicle repairs	67.83
Traveling	1,246.56
Transportation	22.60
Communication	249.42
Other expenses	1.74
 Supplies	 439.76
Food supplies	120.30
Office supplies	220.18
Educational and recreational supplies	10.60
Agricultural and botanical supplies...	6.00
Motor vehicle supplies	68.53
Other supplies	14.15
 Total teacher training in agriculture.....	 \$ 13,095.10
 Engineering:	
Personal service	\$ 52,144.65
Salaries	\$ 50,893.78
Wages	1,250.87

STATEMENT XIV—CONTINUED

Contractual services		\$ 855.79
General repairs	\$ 43.55	
Traveling	247.90	
Transportation	142.24	
Communication	168.31	
Printing	11.22	
Other expenses	242.57	
 Supplies		519.51
Medical and laboratory supplies.....	262.18	
Other supplies	257.33	
 Total engineering		\$ 53,519.95
 Teacher Training in Trades and Industries:		
Personal service		\$ 699.96
Salaries	\$ 699.96	
 Supplies		5.75
Office supplies	5.75	
 Total teacher training in trades and industries..		\$ 705.71
 Mechanic Arts:		
Personal service		\$ 20,480.88
Salaries	\$ 9,096.50	
Wages	11,384.38	
 Contractual services		1,200.33
General repairs	836.38	
Transportation	236.63	
Communication	103.28	
Printing	24.04	
 Supplies		2,921.86
Office supplies	10.74	
Laundry, cleaning, and disinfectant	21.21	
Other supplies	2,889.91	
 Materials		2,331.78
Building materials	1,955.68	
Sewer and water materials	376.10	
 Total mechanic arts		\$ 26,934.85
 Printing:		
Personal service		\$ 13,391.67
Salaries	\$ 9,779.66	
Wages	3,612.01	
 Contractual services		2,766.13
General repairs	22.40	
Transportation	971.53	
Communication	96.01	
Other expenses	1,676.19	

STATEMENT XIV—CONTINUED

Supplies	\$	929.76
Laundry, cleaning, and disinfectant....\$	9.00	
Other supplies	920.76	
Materials		9,415.35
Sundry materials	9,415.35	
Total printing	\$	26,502.91
Academic Subjects and Applied Science:		
Personal service	\$	85,025.93
Salaries	\$	84,775.18
Wages	250.75	
Contractual services		645.93
General repairs	278.98	
Traveling	59.93	
Transportation	165.56	
Communication	103.30	
Other expenses	38.16	
Supplies		2,004.46
Fuel	35.30	
Office supplies	40.57	
Medical and laboratory supplies	1,817.30	
Educational and recreational supplies	17.00	
Other supplies	94.29	
Total academic subjects and applied science.....	\$	87,676.32
Military Science and Tactics:		
Personal service	\$	7,005.00
Salaries	\$	6,965.00
Wages	40.00	
Contractual services		795.61
General repairs	132.46	
Traveling	190.03	
Transportation	51.41	
Communication	71.16	
Other expenses	350.55	
Supplies		726.64
Fuel	31.60	
Office supplies	57.25	
Other supplies	637.79	
Total military science and tactics.....	\$	8,527.25
Total instruction—Regular	\$	276,853.67

STATEMENT XIV—CONTINUED

Instruction—Auxiliary agencies:

Summer quarter.

Personal service	\$ 10,792.50
Salaries	10,642.50
Wages	62.50
Special payments	87.50
Contractual services	80.00
Communication	5.00
Other expenses	75.00
Fixed charges	75.00
Rent	75.00
Total summer quarter	\$ 10,947.50
Total instruction—Auxiliary agencies.....	\$ 10,947.50
Total instruction	\$ 287,801.17

Operation of Coordinating Activities.

Library:

Personal service	\$ 6,130.00
Salaries	5,460.00
Wages	670.00
Contractual services	555.26
General repairs	10.26
Traveling	30.37
Transportation	37.44
Communication	66.44
Printing	377.75
Other expenses	33.00
Supplies	36.47
Office supplies	36.47
Total library	\$ 6,721.73

Hospital:

Personal service	\$ 9,549.65
Salaries	9,507.69
Wages	41.96
Contractual services	1,276.61
General repairs	923.19
Traveling	177.16
Transportation	46.03
Communication	109.35
Other expenses	20.88
Supplies	1,188.58
Food supplies	31.27
Medical and laboratory supplies	927.82
Laundry, cleaning, and disinfectant	9.00
Refrigerating supplies	45.50
Other supplies	174.99
Total hospital	\$ 12,014.84

STATEMENT XIV—CONTINUED

Providing Subsistence for Students:

Personal service	\$ 29,941.39
Salaries	\$ 29,941.39
Contractual services	1,797.19
General repairs	574.90
Traveling	7.85
Transportation	717.09
Communication	73.35
Other expenses	424.00
Supplies	101,750.22
Food supplies	98,530.89
Fuel	1,204.67
Laundry, cleaning, and disinfectant	229.70
Refrigerating supplies	91.40
Other supplies	1,693.56
Total providing subsistence for students.....	\$ 133,488.80

Tailor Shop:

Personal service	\$ 11,974.15
Salaries	\$ 5,065.00
Wages	6,909.15
Contractual services	291.45
General repairs	16.44
Transportation	223.35
Communication	51.66
Supplies	28,094.81
Fuel	46.54
Wearing apparel	27,976.23
Other supplies	72.04
Total tailor shop	\$ 40,360.41

Laundry:

Personal service	\$ 10,671.64
Salaries	\$ 6,625.00
Wages	4,046.64
Contractual services	186.02
General repairs	61.39
Transportation	80.25
Communication	44.38
Supplies	2,506.30
Office supplies	2.57
Laundry, cleaning, and disinfectant	2,001.01
Other supplies	502.72
Total laundry	\$ 13,363.96

STATEMENT XIV—CONTINUED

Farm:

Personal service	\$ 4,704.75
Salaries	3,569.00
Wages	1,130.75
Special payments	5.00
Contractual services	973.39
General repairs	790.12
Transportation	156.65
Communication	26.61
Supplies	1,812.65
Forage and veterinary	1.16
Fuel	6.38
Agricultural and botanical supplies	1,492.49
Motor vehicle supplies	227.41
Other supplies	85.21
Fixed charges	650.00
Rent	650.00
Total farm	\$ 8,140.78

Dairy Husbandry:

Personal service	\$ 5,391.03
Salaries	2,903.59
Wages	2,487.44
Contractual services	1,446.82
General repairs	356.77
Light, heat, power, and water	2.00
Traveling	73.65
Transportation	596.24
Communication	87.04
Other expenses	331.12
Supplies	6,279.60
Forage and veterinary	6,019.70
Fuel	16.22
Laundry, cleaning, and disinfectant	20.45
Other supplies	223.23
Materials	201.60
Building materials	183.30
Other materials	18.30
Total dairy husbandry	\$ 13,319.05

Animal Husbandry:

Personal service	\$ 2,852.75
Salaries	2,190.00
Wages	662.75
Contractual services	1,206.91
General repairs	44.59
Traveling	173.33
Transportation	690.43

STATEMENT XIV—CONTINUED

Communication	\$ 86.86	
Other expenses	211.70	
 Supplies		\$ 4,553.00
Forage and veterinary	4,354.27	
Fuel	9.02	
Office supplies .....	.60	
Medical and laboratory supplies	20.26	
Agricultural and botanical supplies	6.20	
Wearing apparel	15.00	
Other supplies	147.65	
 Materials		100.50
Building materials	92.50	
Other materials	8.00	
 Total animal husbandry		\$ 8,713.16
 Creamery:		
Personal service		\$ 3,068.66
Salaries	\$ 2,012.12	
Wages	1,056.54	
 Contractual services		358.63
General repairs	42.71	
Transportation	225.26	
Communication	61.55	
Other expenses	29.11	
 Supplies		12,857.25
Forage and veterinary	146.21	
Fuel	11,733.37	
Laundry, cleaning, and disinfectant	56.43	
Motor vehicle supplies	243.08	
Other supplies	678.16	
 Total creamery		\$ 16,284.54
 Total operation of coordinating activities.....		\$ 252,407.27
 Operation of Plant.		
Power plant:		
Personal service		\$ 10,404.38
Salaries	\$ 657.00	
Wages	9,747.38	
 Contractual services		2,381.16
General repairs	2,145.07	
Traveling	27.86	
Transportation	144.96	
Communication	61.27	
Other expenses	2.00	
 Supplies		32,456.22
Fuel	31,585.84	
Other supplies	870.38	
 Total power plant		\$ 45,241.76

STATEMENT XIV—CONTINUED

Electric Service:		
Personal service	\$	3,577.10
Salaries	\$	1,865.00
Wages		1,712.10
Contractual services		410.26
General repairs		13.36
Transportation		211.95
Communication		156.10
Other expenses		28.85
Supplies		2,929.93
Office supplies .....		.48
Motor vehicle supplies		38.65
Other supplies		2,890.80
Total electric service	\$	6,917.29
Total operation of plant.....	\$	<u>52,159.05</u>
Maintenance of Plant and Equipment.		
Plumbing, sewage, and water service:		
Personal service	\$	3,809.93
Salaries	\$	2,435.03
Wages		1,374.90
Contractual services		1,725.41
General repairs		1,559.65
Transportation		98.14
Communication		67.62
Supplies		960.50
Motor vehicle supplies		8.75
Other supplies		951.75
Materials		1,697.01
Sewage and water materials		1,697.01
Total plumbing, sewage, and water service.....	\$	<u>8,192.85</u>
Buildings and Grounds:		
Personal service	\$	25,901.32
Salaries	\$	11,010.33
Wages		13,906.10
Special payments		984.89
Contractual services		7,027.09
General repairs		5,777.15
Light, heat, power, and water		318.02
Transportation		838.41
Communication		32.65
Other expenses		60.85

STATEMENT XIV—CONTINUED

Supplies	\$ 2,725.93
Forage and veterinary	157.98
Fuel	241.38
Laundry, cleaning, and disinfectant	157.76
Agricultural and botanical supplies	57.83
Motor vehicle supplies	981.55
Other supplies	1,129.43
Materials	7,015.17
Building materials	6,493.75
Sewer and water materials	14.25
Other materials	507.17
Fixed charges	8,692.50
Insurance	8,692.50
Total buildings and grounds.....	\$ 51,362.01
Total maintenance of plant and equipment.....	\$ 59,554.86
Debt Service:	
Interest payments	\$ 7,737.89
Total debt service	\$ 7,737.89
Capital Outlays:	
Land	\$ 5,836.58
Structures	35,399.26
Equipment	92,399.15
Office equipment	\$ 1,676.90
Household equipment	7,413.80
Medical and laboratory equipment	13,961.83
Live stock equipment.....	3,067.54
Motor vehicle equipment	3,481.45
Educational and recreational	4,773.91
Other equipment	58,023.72
Total capital outlays	\$ 133,634.99
Total disbursements	\$ 825,644.08
Summary	
Total administration	\$ 32,348.85
Total instruction—Regular	276,853.67
Total instruction—Auxiliary agencies	10,947.50
Total operation of coordinating activities	252,407.27
Total operation of plant	52,159.05
Total maintenance of plant and equipment	59,554.86
Total debt service	\$ 7,737.89
Total disbursements	\$ 825,644.08

STATEMENT XV

Statement of the disbursements of Virginia Military Institute for the year ended February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 19,320.02
Salaries	<u>\$19,320.02</u>
Contractual services	9,081.31
Light, heat, power, and water	300.00
Traveling	1,563.78
Communication	889.38
Printing	4,905.07
Insurance	50.00
Other expenses	4,373.08
Supplies	1,697.49
Office	740.00
Other supplies	<u>957.49</u>
Total administration	<u>\$ 30,098.82</u>
Instruction—Regular:	
Personal service	\$ 119,354.02
Salaries	<u>\$ 119,354.02</u>
Contractual services	500.00
Sundry expenses	<u>500.00</u>
Supplies	3,946.05
Sundry supplies	<u>3,946.05</u>
Total instruction—Regular	<u>\$ 123,800.07</u>
Instruction—Auxiliary agencies.	
Summer schools:	
Personal service	\$ 4,387.70
Salaries	\$ 3,337.31
Wages	<u>1,050.39</u>
Contractual services	442.95
General repairs	<u>442.95</u>
Supplies	4,302.35
Food supplies	3,027.78
Other supplies	<u>275.57</u>
Total summer school	<u>\$ 9,133.00</u>
Short courses in engineering:	
Personal service	\$ 591.11
Wages	<u>\$ 591.11</u>

STATEMENT XV—CONTINUED

Athletic training:

Contractual services	\$ 9,000.00
Sundry expenses	
	\$ 9,000.00
Supplies	1,766.89
Food supplies	
	1,766.89
Total athletic training	\$ 10,766.89

Library:

Personal service	\$ 1,910.84
Salaries	
	\$ 1,910.84
Supplies	1,245.08
Sundry supplies	
	1,245.08
Total library	\$ 3,155.92
Total instruction—Auxiliary agencies.....	\$ 23,646.92
Total instruction	\$ 147,466.99

Operation of Coordinating Activities.

Hospital:

Personal service	\$ 5,137.18
Salaries	\$ 4,383.34
Wages	753.84
Contractual services	750.96
General repairs	132.96
Light, heat, power, and water	585.00
Communication	33.00
Supplies	2,745.34
Food supplies	1,768.39
Medical laboratory	638.00
Laundry, cleaning, and disinfectant....	193.95
Other supplies	145.34
Total hospital	\$ 8,633.48

Tailor shop:

Personal service	\$ 22,937.23
Salaries	\$ 1,330.00
Wages	21,607.23
Contractual services	227.25
Light, heat, power, and water	140.00
Transportation	87.25
Supplies	30,356.70
Wearing apparel	
	30,356.70
Total tailor shop	\$ 53,521.18

STATEMENT XV—CONTINUED

Military store:		
Personal service	\$	5,070.00
Salaries	\$	5,070.00
Contractual services		3,073.91
Transportation	875.96	
Other expenses	2,197.95	
Supplies		58,907.29
Laundry, cleaning, and disinfectant....	15,326.55	
Other supplies	43,580.74	
Total military store	\$	67,051.20
Commissary:		
Personal service	\$	24,913.15
Salaries	\$	3,144.00
Wages		21,769.15
Contractual services		3,337.83
Light, heat, power, and water	1,255.27	
Transportation	1,049.56	
Communication	33.00	
Supplies		130,046.40
Food supplies	\$	128,369.63
Laundry, cleaning, and disinfectant....		1,676.77
Total commissary	\$	157,297.38
Barber shop:		
Personal service	\$	4,806.40
Wages	\$	4,806.40
Total operation of coordinating activities.....	\$	291,309.64
Operation of Plant.		
Personal service	\$	5,772.93
Salaries	\$	1,296.00
Wages		4,476.93
Contractual services		4,456.74
General repairs	1,846.00	
Light, heat, power, and water	2,510.74	
Transportation	100.00	
Supplies		21,458.69
Fuel	20,264.81	
Other supplies		1,193.88
Total operation of plant	\$	31,688.36
Maintenance of Plant and Equipment.		
Personal service	\$	13,903.90
Salaries	\$	2,840.00
Wages		11,063.90

STATEMENT XV—CONTINUED

Contractual services	\$ 22,413.80
General repairs	17,653.29
Motor vehicle repairs	60.00
Light, heat, power, and water	3,094.85
Transportation	529.66
Communication	48.00
Insurance	1,028.00
Supplies	3,113.20
Motor vehicle supplies	435.37
Other supplies	2,677.83
Total maintenance of plant and equipment.....	\$ 39,430.90
Capital Outlay.	
Equipment	\$ 11,934.39
Office	497.80
Household	129.52
Medical and laboratory	3,313.24
Other equipment	7,793.83
Land and buildings	178,142.25
Land	15,500.00
Building	162,642.25
Total capital outlay	\$ 190,076.64
Debt Service.	
Interest and sinking fund.....	\$ 1,368.29
Interest	1,368.29
Total debt service	\$ 1,368.29
Total disbursements	\$ 731,419.64
Summary	
Total administration	\$ 30,098.82
Total instruction—Regular	123,800.07
Total instruction—Auxiliary activities.....	291,309.64
Total operation of coordinating activities.....	291,309.64
Total operation of plant.....	31,688.36
Total maintenance of plant and equipment.....	39,430.90
Total capital outlay	190,076.64
Total debt service	1,368.29
Total disbursements	\$ 731,419.64

STATEMENT XVI

Statement of the disbursements of the Medical College of Virginia for the year ended February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 18,665.00
Salaries	<u>\$ 18,665.00</u>
Contractual services	10,523.34
Traveling	317.95
Communication	2,187.51
Printing	2,540.68
Other expenses	<u>5,477.20</u>
Supplies	606.09
Office supplies	<u>606.09</u>
Fixed charges	1,418.77
Insurance	<u>1,418.77</u>
Total administration	<u>\$ 31,213.20</u>
Instruction—Regular.	
Medicine:	
Personal service	\$ 57,904.06
Salaries	<u>\$ 57,904.06</u>
Contractual services	6,316.87
Traveling	100.70
Printing	247.54
Other expenses	<u>5,968.63</u>
Supplies	9,234.44
Medical and laboratory supplies	<u>9,234.44</u>
Total medicine	<u>\$ 73,455.37</u>
Dentistry:	
Personal service	\$ 40,306.40
Salaries	<u>\$ 40,306.40</u>
Contractual services	946.34
Traveling	320.25
Printing	372.66
Other expenses	<u>253.43</u>
Supplies	6,051.74
Medical and laboratory	<u>6,051.74</u>
Total dentistry	<u>\$ 47,304.48</u>

STATEMENT XVI—CONTINUED

Pharmacy:

Personal service	\$ 16,994.91
Salaries	\$ 16,994.91
Contractual services	504.48
Traveling	261.77
Printing	91.62
Other expenses	151.29
Supplies	734.67
Medical and laboratory	734.67
Total pharmacy	\$ 18,234.06
Total instruction—Regular	\$ 138,993.91
Total instruction	\$ 138,993.91

Operation of Coordinating Activities.

Library:

Personal service	\$ 1,775.00
Salaries	\$ 1,775.00
Contractual services	2,696.07
Sundry expenses	2,696.07
Total library	\$ 4,471.07
Total operation of coordinating activities.....	\$ 4,471.07

Maintenance of Plant and Equipment.

Personal service	\$ 7,072.91
Salaries	\$ 7,072.91
Contractual services	7,938.38
General repairs	5,353.11
Light, heat, power, and water	2,585.27
Supplies	3,078.85
Fuel	2,021.62
Laundry, cleaning and disinfectant....	1,057.23
Total maintenance of plant and equipment.....	\$ 18,090.14

Debt Service.

Interest	\$ 6,755.00
Total debt service	\$ 6,755.00

Capital Outlay.

Equipment	\$ 13,618.71
Household equipment	\$ 7,493.53
Medical and laboratory equipment....	5,348.25
Other equipment	776.93
Total capital outlay	\$ 13,618.71
Total disbursements	\$ 213,142.03

STATEMENT XVI—CONTINUED

Summary

Total administration	\$ 31,213.20
Total instruction—Regular	138,993.91
Total operation of coordinating activities.....	4,471.07
Total maintenance of plant and equipment	18,090.14
Total debt service	6,755.00
Total capital outlay	13,618.71
 Total administration	 \$ 16,998.25

STATEMENT XVII

Disbursements of State Teachers College, Farmville, for the year ended February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 13,241.80
Salaries	<u>\$ 13,241.80</u>
Contractual services	5,086.78
General repairs	104.70
Traveling	990.98
Transportation	46.38
Communication	1,121.54
Printing	2,330.15
Other expenses	493.30
Supplies	491.26
Office	<u>491.26</u>
Contribution	100.00
Sundry contributions	<u>100.00</u>
Total administration	<u>\$ 18,919.84</u>
Instruction—Regular:	
Personal service	\$ 106,664.52
Salaries	<u>\$ 106,664.52</u>
Contractual services	557.71
General repairs	20.40
Motor vehicle	344.96
Transportation	192.35
Supplies	2,079.23
Educational and recreational	<u>1,936.40</u>
Motor vehicle	<u>142.83</u>
Total instruction—Regular	<u>\$ 109,301.46</u>

STATEMENT XVII—CONTINUED

Instruction—Auxiliary Agencies:

Library:

Personal service	\$ 2,770.00
Salaries	<u>2,770.00</u>
Contractual services	160.29
Communication	13.15
Other expenses	147.14
Supplies	118.34
Office	118.34
Total library	\$ 3,048.63
Total instruction—Auxiliary agencies.....	\$ 3,048.63
Total instruction	<u>\$ 112,350.09</u>

Operation of Coordinating Activities.

Maintenance of students and employees:

Personal service	\$ 32,904.18
Salaries	\$ 31,501.33
Wages	1,402.85
Contractual services	11,513.81
General repairs	84.24
Light, heat, power, and water.....	10,084.53
Transportation	1,345.04
Supplies	71,531.76
Food	67,087.10
Fuel	876.79
Medical and laboratory	411.67
Laundry, cleaning, and disinfectant.....	2,068.70
Refrigerating	129.25
Other supplies	958.25
Materials	376.90
Sundry materials	376.90
Total maintenance of students and employees....	\$ 116,326.65

Laundry:

Personal service	\$ 7,127.76
Salaries	\$ 2,345.00
Wages	4,782.76
Contractual services	10.70
Transportation	10.70
Supplies	1,206.09
Fuel	486.23
Laundry, cleaning, and disinfectant....	443.99
Other supplies	275.87
Materials	15.60
Sundry materials	15.60
Total laundry	\$ 8,360.15

STATEMENT XVII—CONTINUED

Book store:		
Personal service	\$	1,000.00
Salaries and wages	\$ 1,000.00	
Contractual services		156.40
Transportation	156.40	
Supplies		8,698.35
Sundry supplies	8,698.35	
Total book store	\$	9,854.75
Total operation of coordinating activities.....	\$	134,541.55
Operation of Plant:		
Personal service	\$	3,299.50
Salaries	\$ 3,299.50	
Contractual services		172.51
General repairs	142.37	
Transportation	30.14	
Supplies		17,657.44
Fuel	17,563.65	
Other supplies	93.79	
Materials		551.25
Sundry materials	551.25	
Total operation of plant	\$	21,680.70
Maintenance of plant and equipment:		
Personal service	\$	11,477.29
Salaries	\$ 17,560.01	
Wages	727.12	
Special payments	3,190.16	
Contractual services		7,721.05
General repairs	7,476.96	
Motor vehicle	91.59	
Transportation	152.50	
Supplies		684.95
Agricultural and botanical.....	417.30	
Motor vehicle	267.65	
Materials		4,281.90
Building materials	1,371.46	
Other materials	2,910.44	
Fixed charges		11,688.39
Rents	7,077.96	
Insurance	4,610.43	
Total maintenance of plant and equipment.....	\$	35,853.58

STATEMENT XVII—CONTINUED

Debt Service:		
Interest	\$	5,815.18
Total debt service	\$	5,815.18
Capital Outlay:		
Land	\$	17,668.94
Structures	\$	111,985.76
Equipment		24,008.36
Office equipment	\$	100.72
Household equipment	\$	16,404.68
Motor vehicles		446.09
Educational equipment		4,078.67
Other equipment		2,978.20
Total capital outlay	\$	153,663.06
Total disbursements	\$	482,824.00

STATEMENT XVIII

Disbursements of State Teachers College, Fredericksburg, for the year ended February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 9,890.87
Salaries	\$ 9,890.87
Contractual services	3,927.72
Traveling	411.57
Transportation	38.58
Communication	1,481.19
Printing	1,862.48
Other expenses	133.90
Supplies	962.83
Office	962.83
Total administration	\$ 14,781.42
Instruction—Regular:	
Personal service	\$ 75,528.99
Salaries	\$ 75,528.99
Contractual services	1,274.96
General repairs	50.00
Traveling	95.00
Transportation	579.21
Other expenses	550.75
Supplies	1,545.05
Medical and laboratory.....	906.68
Educational and recreational.....	638.37
Total instruction—Regular	\$ 78,349.00

STATEMENT XVIII—CONTINUED

Instruction—Auxiliary Agencies:

Library:

Personal service	\$	949.65
Salaries	\$	949.65
Supplies		40.53
Sundry supplies		40.53
Total library	\$	990.18
Total instruction—Auxiliary agencies.....	\$	990.18
Total instruction	\$	79,339.18

Operation of Coordinating Activities.

Maintenance of students and employees:

Personal service	\$	16,009.35
Salaries	\$	8,132.90
Wages		7,876.45
Contractual services		3,745.36
General repairs		390.47
Light, heat, power, and water.....		3,028.49
Traveling		15.15
Transportation		265.48
Other expenses		45.77
Supplies		39,714.28
Food		37,360.63
Fuel		888.15
Medical and laboratory		260.64
Laundry, cleaning, and disinfectant....		464.50
Refrigerating		93.09
Motor vehicle		431.73
Other supplies		215.54
Total maintenance of students and employees....	\$	59,468.99

Laundry:

Personal service	\$	2,535.68
Wages	\$	2,535.68
Contractual services		5.95
Transportation		5.95
Supplies		317.71
Laundry, cleaning, and disinfectant....		294.35
Other supplies		23.36
Total laundry	\$	2,859.34

Book store:

Personal service	\$	91.67
Salaries and wages	\$	91.67
Contractual services		89.19
Transportation		89.19
Supplies		6,407.41
Sundry supplies		6,407.41
Total book store		6,588.27
Total operation of coordinating activities.....	\$	68,916.60

STATEMENT XVIII—CONTINUED

Operation of Plant:		
Personal service	\$ 2,446.75	
Wages	<u>\$ 2,446.75</u>	
Supplies	7,054.67	
Fuel	6,940.20	
Other supplies	<u>114.47</u>	
Total operation of plant.....	<u>\$ 9,501.42</u>	
Maintenance of Plant and Equipment:		
Personal service	\$ 7,182.09	
Salaries	1,200.00	
Wages	5,712.59	
Special payments	<u>269.50</u>	
Contractual services	798.75	
General repairs	189.15	
Motor vehicle	466.55	
Transportation	<u>143.05</u>	
Supplies	52.84	
Sundry supplies	<u>52.84</u>	
Materials	2,619.56	
Building materials	1,341.06	
Sewer and water	<u>1,278.50</u>	
Fixed charges	8,389.92	
Rents	7,530.00	
Insurance	<u>859.92</u>	
Total maintenance of plant and equipment.....	<u>\$ 19,043.16</u>	
Operation of Farms:		
Personal service	\$ 910.50	
Salaries	<u>\$ 910.50</u>	
Supplies	352.10	
Agricultural supplies	139.79	
Forage and veterinary supplies.....	<u>212.31</u>	
Total operation of farms.....	<u>\$ 1,262.60</u>	
Debt Service:		
Interest	\$ 911.12	
Total debt service	<u>\$ 911.12</u>	

STATEMENT XVIII—CONTINUED

Capital Outlay:

Land	\$ 1,611.92
Structures	56,723.22
Equipment	6,430.60
Office equipment	\$ 83.47
Household equipment	3,728.44
Medical and laboratory equipment	167.46
Live stock	33.05
Educational equipment	67.04
Other equipment	2,351.14
Total capital outlay	\$ 64,765.74
Total disbursements	\$ 258,521.24

STATEMENT XIX

Disbursements of State Teachers College, Harrisonburg, for the year ended February 28, 1927
 Financial Section 1927, Virginia Education Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 14,078.35
Salaries	\$ 14,078.35
Contractual services	3,686.05
Traveling	471.76
Communication	744.22
Printing	1,584.99
Other expenses	885.08
Supplies	699.43
Office	699.43
Total administration	\$ 21,463.83
Instruction—Regular:	
Personal service	\$ 86,886.30
Salaries	\$ 86,886.30
Contractual services	636.37
Traveling	369.20
Communication	119.75
Printing	63.48
Supplies	2,219.69
Medical and laboratory	1,381.65
Educational and recreational	582.18
Motor vehicle	255.86
Total instruction—Regular	\$ 89,742.36

STATEMENT XIX—CONTINUED

Instruction—Auxiliary Agencies:

Library:

Personal service	\$ 2,568.59
Salaries	<u>2,568.59</u>
Supplies	145.76
Sundry supplies	<u>145.76</u>
Total library	\$ 2714.35
	<u>2714.35</u>

Music:

Personal service	\$ 6,061.80
Salaries	<u>6,061.80</u>
Contractual services	105.40
General repairs	91.00
Communication	2.40
Printing	<u>12.00</u>
Supplies	47.31
Educational	<u>47.31</u>
Total music	\$ 6,214.31
Total instruction—Auxiliary agencies.....	\$ 8,928.66
Total instruction	\$ 98,671.02
	<u>98,671.02</u>

Operation of Coordinating Activities.

Maintenance of students and employees:

Personal service	\$ 28,007.46
Salaries	\$ 27,356.41
Wages	<u>27,356.41</u>
Contractual services	6,032.48
General repairs	355.57
Light, heat, power, and water.....	<u>5,455.97</u>
Traveling	110.83
Communication	27.25
Printing	3.40
Other expenses	<u>29.50</u>
Supplies	\$ 58,396.92
Food	55,832.66
Fuel	807.76
Medical and laboratory	338.50
Laundry, cleaning, and disinfectant....	<u>1,139.07</u>
Refrigerating	246.33
Other supplies	<u>32.60</u>
Total maintenance of students and employees....	\$ 92,436.86
	<u>92,436.86</u>

STATEMENT XIX—CONTINUED

Laundry:

Personal service	\$	4,621.41
Salaries	\$	840.00
Wages		3,781.41
Contractual services		935.71
General repairs		138.72
Light, heat, power, and water		796.99
Supplies		413.36
Laundry, cleaning, and disinfectant....		363.76
Other supplies		49.60
Total laundry	\$	5,970.48

Book store:

Personal service	\$	966.01
Salaries and wages	\$	
Supplies		11,755.85
Educational and recreational		3,382.41
Other supplies		8,373.44
Total book store	\$	12,721.86
Total operation of coordinating activities.....	\$	111,129.20

Operation of Plants:

Personal service	\$	3,170.41
Wages	\$	
Contractual services		122.91
General repairs		
Supplies		7,479.77
Fuel		7,469.97
Other supplies		9.80
Total operation of plant	\$	10,773.09

Maintenance of Plant and Equipment:

Personal service	\$	12,287.85
Salaries	\$	1,599.99
Wages		10,687.86
Contractual services		2,314.06
General repairs		2,237.62
Transportation		76.44
Supplies		241.31
Agricultural and botanical		142.10
Other supplies		2.00
Forage and veterinary		97.21
Materials		861.98
Building materials		369.25
Sewer and water		329.91
Other materials		162.82
Fixed charges		11,047.71
Rents		9,454.08
Insurance		1,593.63
Total maintenance of plant and equipment.....	\$	26,752.91

STATEMENT XIX—CONTINUED

Capital Outlay:

Land	\$ 1,000.00
Structures	155,191.80
Equipment	8,373.05
Household equipment	\$ 7,060.50
Educational equipment	250.00
Other equipment	1,062.55
Total capital outlay	\$ 164,564.85
Total disbursements	\$ 433,354.90

STATEMENT XX

Disbursements of State Teachers College, Radford, for the year ended February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 9,296.21
Salaries	\$ 9,296.21
Contractual services	5,921.25
Heat, light, power, and water.....	140.72
Traveling	491.67
Communication	2,042.11
Printing	2,447.83
Supplies	1,755.50
Office	1,547.88
Other supplies	207.62
Total administration	\$ 16,972.96
Instruction—Regular:	
Personal service	\$ 68,787.60
Salaries	\$ 68,787.60
Contractual services	594.77
Transportation	594.77
Supplies	3,497.02
Medical and laboratory	1,154.46
Educational and recreational	672.18
Motor vehicle	410.17
Other supplies	1,260.20
Total instruction—Regular	\$ 72,879.39
Instruction—Auxiliary Agencies:	
Library:	
Personal service	\$ 1,855.87
Salaries	\$ 1,855.87
Supplies	247.69
Sundry supplies	247.69
Total library	\$ 2,103.56

STATEMENT XX—CONTINUED

Extension courses:		
Personal service	\$ 7,479.48	
Salaries		
Contractual services	1,311.91	
Traveling	146.50	
Communication	542.40	
Printing	623.01	
Supplies	81.54	
Sundry supplies		
Total extension courses	\$ 8,872.93	
Total instruction--Auxiliary agencies.....	\$ 10,976.49	
Total instruction	\$ 83,855.88	
Operation of Coordinating Activities.		
Maintenance of students and employees:		
Personal service	\$ 14,503.34	
Salaries	\$ 14,219.18	
Wages	284.16	
Contractual services	1,656.71	
Light, heat, power, and water.....		
Supplies	45,913.55	
Food	43,332.75	
Forage and veterinary.....	181.90	
Medical and laboratory	179.52	
Refrigerating	436.50	
Other supplies	1,782.88	
Total maintenance of students and employees....	\$ 62,073.60	
Laundry:		
Personal service	\$ 3,078.99	
Salaries	\$ 1,410.00	
Wages	1,668.99	
Contractual services	281.42	
Light, heat, power, and water.....		
Supplies	553.63	
Laundry, cleaning, and disinfectant....		
Total laundry	\$ 3,914.04	
Book store:		
Personal service	\$ 237.15	
Salaries and wages		
Contractual services	260.71	
Transportation		
Supplies	14,652.58	
Sundry supplies		
Total book store	\$ 15,150.44	
Total operation of coordinating activities.....	\$ 81,138.08	

STATEMENT XX—CONTINUED

Operation of Plant:

Personal service	\$ 1,292.46
Wages	\$ 1,292.46
Contractual services	291.27
General repairs	150.55
Light, heat, power, and water.....	140.72
Supplies	4,391.92
Fuel	4,391.92
Total operation of plant	\$ 5,975.65

Maintenance of Plant and Equipment:

Personal service	\$ 4,365.20
Salaries	\$ 2,760.00
Wages	1,605.20
Contractual services	2,814.97
General repairs	2,814.97
Supplies	380.48
Agricultural and botanical	124.45
Motor vehicle	256.03
Materials	495.84
Building materials	495.84
Fixed charges	6,823.87
Rents	5,212.71
Insurance	1,611.16
Total maintenance of plant and equipment.....	\$ 14,880.36

Capital Outlay:

Land	\$ 5,243.27
Structures	70,625.24
Equipment	17,721.40
Office equipment	\$ 324.80
Household equipment	4,043.60
Medical and laboratory equipment.....	1,908.27
Motor vehicle equipment	1,161.00
Educational equipment	1,367.06
Other equipment	8,916.67
Total capital outlay	\$ 93,589.91
Total disbursements	\$ 296,412.84

STATEMENT XXI

Statement of the disbursements of the Virginia Normal and Industrial Institute at Petersburg for the year ended February 28, 1927

Financial Section 1927, Virginia Educational Survey

CLASSIFICATION	Amount
Administration:	
Personal service	\$ 15,497.43
Salaries	\$ 14,872.00
Wages	625.43
Contractual services	1,090.33
General repairs	5.85
Traveling	287.92
Transportation	2.27
Communication	746.44
Printing	47.85
Supplies	410.49
Office supplies	410.49
Total administration	<u>\$ 16,998.25</u>
Instruction—Regular.	
Academic and normal courses:	
Personal service	\$ 49,042.33
Salaries	\$ 46,696.36
Wages	1,523.47
Special payments	822.50
Contractual services	1,773.09
General repairs	74.31
Traveling	542.24
Transportation	183.50
Communication	367.51
Printing	605.53
Supplies	1,253.57
Office supplies	91.58
Fuel supplies	35.90
Laundry, cleaning, and disinfectant supplies	24.85
Educational supplies	1,101.24
Total academic and normal courses.....	<u>\$ 25,068.99</u>
Mechanic arts:	
Personal service	\$ 14,217.90
Salaries	\$ 13,303.86
Wages	914.04
Contractual services	169.56
General repairs	42.66
Traveling	50.00
Transportation	76.90

STATEMENT XXI—CONTINUED

Supplies	\$	2,434.11
Fuel supplies	\$	388.95
Educational supplies		1,727.67
Motor vehicle supplies		136.12
Other supplies		181.37
Materials		221.65
Sundry materials		221.65
Total mechanic arts	\$	17,043.22
<hr/>		
Agriculture:		
Personal service	\$	7,432.58
Salaries	\$	7,278.23
Wages		154.35
Contractual services		328.38
Traveling		328.38
Supplies		183.78
Educational supplies		156.57
Agricultural supplies		27.21
Total agriculture	\$	7,944.74
<hr/>		
Home economics:		
Personal service	\$	4,264.81
Salaries	\$	4,013.33
Wages		251.48
Contractual services		36.88
General repairs		36.88
Supplies		307.26
Food supplies		260.11
Cleaning and disinfectant supplies.....		8.60
Educational supplies		38.55
Total home economics	\$	4,608.95
<hr/>		
Total instruction—Regular	\$	81,665.90
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Instruction—Auxiliary Agencies.		
Instrumental music:		
Personal service	\$	2,114.09
Salaries	\$	2,053.00
Wages		61.09
Contractual service		21.60
General repairs		21.60
Supplies		52.56
Educational supplies		52.56
Total instrumental music	\$	2,188.25
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STATEMENT XXI—CONTINUED

Religious training:

Personal service	\$	349.61
Wages	\$	267.11
Special payments		82.50
 Supplies		180.05
Educational supplies		180.05
 Total religious training.....	\$	529.66

Physical training:

Personal service	\$	4,360.16
Salaries	\$	4,194.41
Wages		7.00
Special payments		158.75
 Contractual services		4,014.70
General repairs		896.34
Traveling		3,065.94
Transportation		5.42
Other expenses		47.00
 Supplies		587.95
Food supplies		80.40
Medical supplies		47.74
Recreational supplies		459.81
 Total physical training	\$	8,962.81

Library:

Personal service	\$	1,519.68
Salaries	\$	1,280.00
Wages		239.68
 Contractual services		40.33
General repairs		40.33
 Supplies		378.67
Office supplies		9.00
Educational supplies		369.67
 Total library	\$	1,938.68
 Total instruction—Auxiliary agencies.....	\$	13,619.40
 Total instruction	\$	95,285.30

Operation of Coordinating Activities.

Maintenance of students and employees:

Personal service	\$	24,470.22
Salaries	\$	12,273.30
Wages		12,196.92
 Contractual services		1,157.27
General repairs		929.80
Transportation		227.47

STATEMENT XXI—CONTINUED

Supplies	\$ 63,773.62
Fuel supplies	998.57
Food supplies	61,158.61
Laundry and cleaning.....	1,532.46
Wearing apparel	83.98
Materials	1,080.00
Sundry materials	1,080.00
Total maintenance of students and employees..	\$ 90,481.11
Book store:	
Personal service	\$ 1,640.27
Salaries	1,140.00
Wages	500.27
Contractual services	158.21
Traveling	29.44
Transportation	128.77
Supplies	15,791.02
Sundry supplies	15,791.02
Total book store	\$ 17,589.50
Cafeteria:	
Personal service	\$ 3,197.13
Salaries	1,353.33
Wages	1,843.80
Supplies	9,392.45
Fuel supplies	543.68
Food supplies	8,848.77
Total cafeteria	\$ 12,589.58
Hospital:	
Personal service	\$ 3,689.45
Salaries	3,010.00
Wages	376.95
Special payments	302.50
Contractual services	30.88
General repairs	30.88
Supplies	540.83
Fuel supplies	60.00
Food supplies	22.61
Medical and laboratory supplies.....	435.92
Laundry and cleaning supplies.....	22.50
Total hospital	\$ 4,261.16
Laundry:	
Personal service	\$ 2,267.38
Salaries	805.00
Wages	1,462.38

STATEMENT XXI—CONTINUED

Contractual services		\$ 28.98
General repairs	\$ 28.98	
Supplies		809.84
Laundry and cleaning supplies.....	269.84	
Fuel	540.00	
Total laundry	\$ 3,106.20	
Publication of catalog and gazette:		
Personal service	\$ 263.33	
Salaries	\$ 263.33	
Contractual services		1,206.20
Communication	33.47	
Printing	1,172.73	
Total publication of catalog and gazette.....	\$ 1,469.53	
Total operation of coordinating activities.....	\$ 129,497.08	
Operation of Plant:		
Personal service	\$ 4,467.17	
Salaries	\$ 3,234.49	
Wages	1,232.68	
Contractual services		4,848.02
General repairs	764.84	
Heat, light, power, and water.....	4,083.18	
Supplies		6,860.67
Fuel	6,842.60	
Other supplies	18.07	
Materials		21.68
Building materials	21.68	
Total operation of plant	\$ 16,197.54	
Maintenance of Plant and Equipment:		
Personal service	\$ 10,521.36	
Salaries	\$ 2,900.00	
Wages	7,621.36	
Contractual services		862.19
General repairs	771.98	
Transportation	90.21	
Supplies		1,433.03
Sundry supplies	1,433.03	
Materials		9,781.50
Highway materials	395.71	
Building materials	8,529.14	
Sewer and water materials.....	856.65	

STATEMENT XXI—CONTINUED

Fixed charges	\$ 10,289.94
Insurance	\$ 10,289.94
Total maintenance of plant and equipment.....	\$ 32,888.02
 Operation of Farm:	
Personal service	\$ 10,827.36
Salaries	\$ 2,000.00
Wages	8,827.36
Contractual services	729.22
General repairs	729.22
Supplies	5,595.39
Forage and veterinary supplies.....	1,707.36
Medical and laboratory supplies.....	3.39
Laundry and cleaning supplies.....	7.54
Agricultural and botanical supplies.....	3,431.40
Other supplies	445.70
Materials	27.60
Sundry materials	27.60
Total operation of farm.....	\$ 17,179.57
 Capital Outlay:	
Land	\$ 12,224.62
Equipment	13,297.82
Office	\$ 56.23
Household	5,469.23
Live stock	500.00
Medical and laboratory	441.12
Educational and recreational.....	5,544.16
Other equipment	1,287.08
Total capital outlay	\$ 25,522.44
Total disbursements	\$ 333,568.20
 Summary	
Total administration	\$ 16,998.25
Total instruction—Regular	81,665.90
Total instruction—Auxiliary agencies	13,619.40
Total operation of coordinating activities.....	129,497.08
Total operation of plant	16,197.54
Total maintenance of plant and equipment.....	32,888.02
Total operation of farm	17,179.57
Total capital outlay	25,522.44
 Total disbursements	\$ 333,568.20

STATEMENT XXII

Total assessed values (in 1925) and taxes assessed for local purposes per pupil in average daily attendance for the year ended June 30, 1927

COUNTY	ASSESSED VALUES		TAXES ASSESSED	
	Total	Per Pupil in A. D. A.*	Total	Per Pupil in A. D. A.*
Accomac.....	\$ 17,582,473 00	\$ 3,163 00	\$ 266,654 07	\$ 47 98
Albemarle.....	18,123,711 00	3,200 00	412,706 95	72 86
Alleghany.....	18,175,791 00	5,694 00	228,383 18	71 55
Amelia.....	4,097,342 00	2,540 00	67,533 26	41 87
Amherst.....	5,695,781 00	1,720 00	123,623 48	37 34
Appomattox.....	3,955,334 00	2,454 00	65,118 43	40 40
Arlington.....	20,288,406 00	4,945 00	478,417 72	116 60
Augusta.....	25,346,245 00	5,067 00	412,929 33	82 55
Bath.....	7,493,799 00	6,137 00	103,351 22	84 64
Bedford.....	16,742,023 00	3,358 00	262,734 45	52 69
Bland.....	1,844,853 00	1,827 00	44,428 40	43 99
Botetourt.....	9,060,346 00	3,045 00	150,709 98	50 66
Brunswick.....	10,818,692 00	2,797 00	189,326 85	47 65
Buchanan.....	4,596,539 00	979 00	156,997 40	33 45
Buckingham.....	4,067,954 00	1,587 00	71,275 60	27 81
Campbell.....	19,944,298 00	5,237 00	285,659 43	75 02
Caroline.....	6,141,253 00	2,147 00	87,063 74	30 44
Carroll.....	4,268,447 00	933 00	108,443 63	23 70
Charles City.....	3,141,251 00	2,835 00	56,283 74	50 80
Charlotte.....	6,685,510 00	2,373 00	148,493 47	52 71
Chesterfield.....	21,926,938 00	5,154 00	270,345 53	63 55
Clarke.....	7,717,243 00	6,367 00	69,678 28	57 49
Craig.....	1,776,174 00	2,436 00	32,490 35	44 57
Culpeper.....	8,187,005 00	3,426 00	131,990 64	55 23
Cumberland.....	2,323,551 00	1,448 00	53,857 16	33 56
Dickenson.....	5,981,262 00	1,863 00	170,350 51	53 05
Dinwiddie.....	11,503,404 00	3,886 00	152,517 43	51 53
Elizabeth City.....	11,810,251 00	4,387 00	148,192 65	55 05
Essex.....	2,377,405 00	1,965 00	42,852 25	35 42
Fairfax.....	15,695,789 00	4,366 00	345,840 38	96 20
Fauquier.....	18,384,193 00	5,078 00	275,666 83	76 15
Floyd.....	2,358,391 00	547 00	85,263 24	19 76
Fluvanna.....	3,344,025 00	2,604 00	59,401 88	46 26
Franklin.....	5,875,913 00	1,245 00	138,885 83	29 43
Frederick.....	6,965,964 00	4,010 00	88,837 66	51 14
Giles.....	10,299,522 00	3,401 00	196,997 60	65 05
Gloucester.....	4,262,794 00	1,403 00	68,936 71	22 69
Goochland.....	3,959,075 00	2,650 00	58,839 00	39 38
Grayson.....	3,682,470 00	1,012 00	99,201 65	27 27
Greene.....	1,754,782 00	1,893 00	27,314 39	29 47
Greenville.....	6,028,413 00	3,042 00	109,109 43	55 05
Halifax.....	19,127,741 00	2,060 00	192,506 24	20 73
Hanover.....	8,772,526 00	2,877 00	123,416 13	40 48
Henrico.....	32,437,955 00	7,551 00	343,445 86	79 95
Henry.....	7,333,378 00	1,834 00	183,563 59	45 90
Highland.....	3,614,540 00	4,242 00	59,778 82	70 16
Isle of Wight.....	6,591,181 00	2,761 00	128,091 73	53 66
James City.....	2,426,651 00	3,901 00	52,638 78	84 63
King George.....	1,769,289 00	1,098 00	28,371 87	17 60
King and Queen.....	2,262,936 00	2,270 00	37,760 34	37 87
King William.....	3,332,035 00	2,108 00	49,054 29	31 03
Lancaster.....	3,317,916 00	2,037 00	53,115 47	32 61
Lee.....	6,737,299 00	1,346 00	205,736 09	41 11
Loudoun.....	21,797,946 00	6,672 00	220,470 04	67 48
Louisa.....	5,881,441 00	2,007 00	105,972 73	38 16
Lunenburg.....	7,290,717 00	2,745 00	149,152 56	56 16
Madison.....	4,541,596 00	3,071 00	68,036 96	46 00
Mathews.....	2,430,572 00	1,689 00	41,321 68	28 72
Mécklenburg.....	14,873,541 00	2,635 00	219,591 12	38 91
Middlesex.....	2,880,907 00	1,968 00	40,043 92	27 35
Montgomery.....	8,573,275 00	2,844 00	135,977 90	45 10
Nansemond.....	9,961,771 00	2,427 00	173,814 13	42 35
Nelson.....	9,637,438 00	3,366 00	110,042 40	38 44
New Kent.....	2,540,688 00	3,110 00	39,815 64	48 73
Norfolk.....	21,841,637 00	4,336 00	456,964 23	90 72
Northampton.....	11,802,450 00	3,884 00	141,955 87	46 71
Northumberland.....	5,243,123 00	2,395 00	77,777 18	35 53
Nottoway.....	8,305,181 00	2,817 00	145,069 37	49 21
Orange.....	11,118,024 00	5,220 00	135,651 37	63 69

STATEMENT XXII—CONTINUED

COUNTY	ASSESSED VALUES		TAXES ASSESSED	
	Total	Per Pupil in A. D. A.*	Total	Per Pupil in A. D. A.*
Page.....	\$ 7,108,507 00	\$ 3,073 00	\$ 106,131 65	\$ 45 88
Patrick.....	3,199,484 00	545 00	66,911 02	11 42
Pittsylvania.....	24,129,126 00	1,758 00	416,913 78	30 78
Powhatan.....	2,466,017 00	2,599 00	39,105 47	41 21
Prince Edward.....	7,649,946 00	3,280 00	114,875 62	49 26
Prince George.....	5,443,203 00	2,014 00	113,393 81	64 87
Princess Anne.....	7,817,852 00	3,576 00	172,021 72	78 69
Prince William.....	7,493,534 00	3,468 00	111,970 99	51 81
Pulaski.....	8,061,366 00	2,460 00	149,346 54	45 57
Rappahannock.....	3,837,427 00	3,249 00	57,569 97	48 75
Richmond.....	1,895,939 00	1,186 00	33,374 79	20 89
Roanoke.....	23,326,786 00	4,453 00	215,524 65	41 14
Rockbridge.....	14,836,903 00	4,277 00	173,461 03	50 00
Rockingham.....	21,993,764 00	4,062 00	288,255 69	53 24
Russell.....	8,384,962 00	1,599 00	257,261 65	49 06
Scott.....	5,821,257 00	648 00	187,423 46	20 86
Shenandoah.....	10,640,240 00	2,856 00	137,306 46	36 86
Smyth.....	6,577,244 00	1,385 00	141,894 22	29 89
Southampton.....	13,466,043 00	3,096 00	243,966 47	56 08
Spotsylvania.....	4,440,251 00	2,450 00	71,345 16	39 37
Stafford.....	2,674,185 00	1,965 00	52,593 14	38 64
Surry.....	4,383,088 00	2,542 00	57,880 93	33 57
Sussex.....	7,137,985 00	3,343 00	122,143 30	55 49
Tazewell.....	12,389,888 00	2,204 00	287,988 01	51 22
Warren.....	3,927,774 00	2,840 00	77,086 81	55 74
Warwick.....	5,443,054 00	4,796 00	93,093 35	82 01
Washington.....	9,393,630 00	1,584 00	267,315 66	45 09
Westmoreland.....	3,235,908 00	1,296 00	45,506 71	18 22
Wise.....	20,645,381 00	1,885 00	703,488 93	18 57
Wythe.....	8,920,206 00	2,554 00	133,772 45	39 31
York.....	2,812,397 00	2,239 00	59,248 58	47 17

*Average daily attendance.

APPENDIX II

**Samples of Questionnaires Used in the
Several Divisions of the Survey**

EXPLANATORY NOTE

When plans were being made for the survey, it was decided that it would be desirable, if it would be possible, to make extensive use of questionnaires for the collection of data in addition to the data secured by direct inspection of work in the schools and higher institutions by members of the staff and associates. It was thought to be advisable for each member of the staff and each associate to make a first hand study of typical situations and problems, each in his special field, and then to gain views of conditions in his field throughout the entire State by soliciting the cooperation of presidents, superintendents, supervisors, principals, and teachers, by means of questionnaires. It was found that in this way a picture could be secured of every department of the public educational system throughout the entire State.

From the sample questionnaires that are presented in this Appendix, all explanatory material has been eliminated in order to economize space and expense in printing. A letter was sent with each copy of the questionnaire indicating what the sender had in view in preparing the questionnaire and explaining the technique of supplying the information requested. A general letter, prepared by Major Barton, chairman of the Educational Commission, accompanied many of the questionnaires. State Superintendent Harris Hart also sent an explanatory letter with a number of the questionnaires. The member of the staff or the associate who prepared the questionnaire indicated in detail how it should be filled out and what cautions should be observed in order to avoid error and to furnish complete information. None of these accompanying letters or introductory statements are included herein. It is believed that the readers will be able to understand the scope and character of each questionnaire without the explanatory material.

material. It may be added that the members of the staff and associates were all gratified by the attention that was given to the questionnaires by the educators and citizens of the State. There was abundant evidence that great pains were taken to supply accurate, detailed, and comprehensive data pertaining to every topic or problem which was being studied by the staff and associates. The reader will doubtless think that some of the questionnaires were very lengthy and complex; but even so the correspondents to whom they were addressed were not dismayed by them. The only complaint received by any member of the survey staff or associates was made by a citizen who found that it consumed too many hours to supply the information requested in the questionnaire relating to the views of citizens concerning the efficiency and proper objectives of the schools and higher institutions of the State. The director desires to take advantage of this opportunity to express the indebtedness of the entire staff and associates to all those who for a number of weeks gave largely of their time and energy to supply the data which were necessary in order that the survey might be made accurate and comprehensive.

Rural Education for Whites: Division Superintendents

1. Such information as we have received thus far would indicate that two factors are influential in determining the length of term for elementary white pupils:
(1) Sometimes this is due to different policies of the districts within the county; (2) sometimes to a policy of providing shorter terms for the smaller schools. There may be other reasons.
 - a. In 1926-27 what was the shortest term in your county?
The longest? The average?
 - b. Please explain fully all the reasons that were responsible for the terms of different length?
 2. Please check the following equipment that you have in your office or that is so readily available to you in another office that you are not seriously inconvenienced: Typewriter ; mimeograph ; adding machine .

3. a. Do you have available a fireproof vault for keeping your more valuable financial and pupil records?
b. If so, how readily accessible is it?
c. Have you known of serious loss to the schools because of the lack of such a vault? Please give details.
4. a. If the clerk of the board is someone other than yourself, is he held by the board strictly accountable to you?
b. If not, will you please give details frankly in a separate letter? Nothing of what you give on this will be published without first securing your consent.
5. a. Have you given the *mental* tests in your county recently?
b. If so, would you send a copy of the results?
c. If you have no such specific data, how many white children of legal school age would you estimate there are in your county so deficient mentally that they *cannot be properly cared for in the regular school?*
6. a. What percentage of your teachers now employed received two years or more of their secondary school training in a high school of the county?
b. In what percentage of cases is the home of the unmarried teacher in the county?
c. In what percentage of cases is the unmarried teacher teaching in the school of the district in which her home is located?
7. a. In general, what is your policy in giving responsibility to principals in schools of four or more teachers?
b. Please check the following list to show your practice in regard to the duties indicated (in schools of four or more teachers):

	By principal alone	By county supt. alone	By consultation of supt. and principal *
(1) Nomination of teachers.....			
(2) Dismissal of teachers.....			
(3) Assignment of teachers to specific grades.....			
(4) Selection of janitors.....			
(5) Direction of janitorial work.....			
(6) Selection of drivers for transportation bus.....			
(7) Administration of transportation.....			
(8) Supervision of instruction.....			
(9) Ordinary disciplinary cases of pupils.....			
(10) Extreme disciplinary cases of pupils.....			
(11) Making the daily schedule.....			
(12) Keeping pupil records.....			
(13) Supervision of building and grounds.....			
(14) Dealing with parents and other citizens on problems connected with the local school.....			

8. Does the county board of education or any of its members tend to assume any responsibility that in your judgment should be left to you? If so, please give illustrations.
9. Please give the following information as definitely as you can that will show what you or your office did during 1926-27 that was intended primarily to educate citizens to the needs of the school:
 - (1) Number of public meetings addressed.

- (2) Did you issue an annual report in printed or mimeographed form? (If you did, will you please send a copy?)
- (3) Did you issue a school bulletin primarily for parents? (If so, will you please send copies?)
- (4) What percentage of your schools have a parent-teacher association or a cooperative education league giving considerable attention to school needs during the year?
- (5) How many times during the year did you use newspapers for this purpose?
- (6) How many county or local school fairs or exhibits were held during the year?
- (7) How many county or local field days were held?
- (8) How many different circular letters (to parents or other citizens) were sent out?
- (9) What other activities for the same purpose were engaged in?

Rural Education for Whites: Principals

1. County..... 2. Name of school.....
3. Name of principal..... 4. Age..... 5. Sex.....
6. No. grades in this school..... 7. No. teachers (grades 1-7).....; (grades 8-11)..... 8. No. pupils (grades 1-7).....; (grades 8-11).....
9. Years of experience (previous to the school year 1927-28):
 - a. As teacher:
 - (1) In grades 1-7..... (2) In grades 8-11.....
 - b. As principal
 - c. In other educational work (describe).....
10. Training:
 - a. No. of years training above high school graduation:
 - (1) In normal school..... (2) In college or university.....
 - b. Amount of professional training in session hours:
 - (1) Educational psychology.....
 - (2) Principles of education, principles of teaching, history of education, philosophy of education, general methods, special methods, supervision
 - (3) School administration
 - (4) Other professional courses.....
11. No. of years in present position.....
12. Estimate *carefully* the percentage of the school day (approximately 8:30 A. M. to 4:30 P. M.) that you give to each of the following activities. (Analyze one or more typical days and be sure that your total equals 100 per cent):
 - a. Teaching (including preparation for teaching during *school* day).....
 - b. Supervision of instruction (visiting classes, conferences with teachers about their work, etc.).....
 - c. Clerical work (work that could be done by a clerk, such as keeping records, handling supplies, making up orders, mimeographing, etc.).....
 - d. Administrative (conferences with pupils and parents; planning work of the school; directing athletics or other pupil activities).....

13. Please check in the appropriate column below to indicate how each of the following duties is performed in your school:

	By yourself as principal	By division superintendent	Divided between principal and superintendent	When a duty is divid- ed between principal and superintendent state briefly what your share is.
a. Nominating teachers.....				
b. Assigning to her particular work in the school.....				
c. Determining teacher's salary.....				
d. Preparing the financial budget for the school.....				
e. Choosing books for school library.....				
f. Selecting equipment to be ordered.....				
g. Selecting supplies to be ordered.....				
h. Controlling pupils in cases of ordinary discipline.....				
i. Controlling pupils in cases involving suspension or expulsion.....				
j. Dealing with the school league.....				
k. Dealing with other community groups and with school patrons.....				
l. Supervision of instruction.....				

Rural Education for Whites: Supervisors

Name of supervisor	Postoffice	County	Date
1. Training:			
a. Number years <i>above</i> high school graduation.			
b. Number of years spent in			
(1) Normal school	(2) College or university.....		
c. Session hours of professional training.....			
2. Experience—Number years preceding 1927-28:			
a. As teacher in			
(1) Grades 1-7.....	(2) Grades 8-11.....		
(3) Elsewhere (describe)			
b. As teacher in			
(1) Open country school.....	(2) Hamlet or village school.....		
(3) City school			
c. As supervisor			
d. Number of years in this position.....			
3. Salary: Per month for.....months.			
4. General information:			
a. No. of buildings supervised.....			
b. No. of teachers supervised.....			
c. No. visits to teachers made in 1926-27.....			
d. No. individual conferences held.....			
e. No. group conferences held.....			
5. What subjects have you emphasized this year and in what grades?.....			
6. List the different methods you use in helping the teacher to improve classroom instruction			

7. What professional improvement activities did you carry on from September, 1926, to September, 1927.....
8. Relation of supervisor to principal (where the principal does not do full time teaching):
 - a. When you go to a school do you report first to the principal of the school?
 - b. Do you confer with him as to the problems to which you should give attention?
 - c. Do you report to him, before leaving, your findings and suggestions?.....
9. If you follow one practice in certain types of schools and not in others, please make such statement as will explain your practice.....

Rural Education for Whites: Teachers

Name of supervisor	Postoffice	County
--------------------	------------	--------

Case No. 1.

Here is the description of a lesson actually given in seventh grade history: The teacher is relatively young; has had five years of experience and holds an Elementary Professional Certificate. She is an alert person, attractive in dress and manner, with, however, a tendency to become overly intense at moments of difficulty. At such times her voice tends to become shrill. She speaks in a louder tone of voice than is necessary to be heard distinctly. The lesson dealt with the establishment of the colonies in Virginia. Holding the book in her hand and glancing at it frequently she asked such questions as: When was Jamestown settled? Who was the leader? Why did the settlers have so many difficulties? All answers were brief. The teacher made few comments. When an error was made by a pupil she called on another. The pupils did not show more than a perfunctory interest in the lesson. At the end of twenty minutes the teacher glanced at her watch, said it was time to stop, and rather abruptly assigned the next three pages for the following day.

It is recognized that there are factors in this situation not here described. However, with such information as is here given, analyze the situation that confronts you as supervisor and answer each of the following questions. Add anything not suggested by these questions that you believe to be significant:

1. Is the subject matter of this lesson important in the education of children, and if so, why is it?
2. What, if any, law or laws of learning has the teacher violated?
3. What do you consider to be the chief weakness of this lesson?
4. Assuming that this is the first time you have observed the teacher of the above lesson, what is your *immediate problem*? (Assume that the teacher is friendly to supervision.) What is your *ultimate problem*?
5. Briefly, how would you deal with her when you have your conference regarding this lesson? Include in your statement here the specific suggestions you would make.
6. What would you look for on your second visit to her?
7. Suppose the teacher disagrees with your evolution of her lesson. What would you do?

Case No. 2

A lesson in second grade arithmetic. The particular problem was counting by 2's to 100. The teacher has a fine bearing, and is unusually attractive in dress and appearance. She may, perhaps, be a little cold in her manner of dealing with children. In this lesson the teacher called on one of the pupils to count to 100. It was well done and brought a smile of approval from the teacher. The next

pupil failed completely. He was severely reprimanded for not studying his lesson. A third pupil did better, but made some mistakes. Some of these mistakes were corrected; others were not. For twenty minutes this same procedure was followed, each pupil getting only momentary attention, for there were about forty in the class. No assignment was made for the next day.

Use same questions as in history lesson.

Rural Education: The County School Board for Albemarle County

	Trustee	Trustee	Trustee	Trustee	Trustee	Trustee
1. Occupation.....						
2. Residence:						
a. Open country.....						
b. Village (give population).						
3. Total length of service on board.....						
4. No. years in continuous service.....						
5. Age (approximate).....						
6. Sex.....						

Elementary Education in Cities

To Superintendents of Public Schools:

1. Will you please indicate:
 - a. The number of white children in your city in the elementary schools who are on part time or half day sessions because of lack of seats or lack of teachers.
 - b. The number of rooms that have an excessive number of pupils.
 - c. The number of additional rooms and teachers you would need if you had as many as the actual number of children would require for a full session and a seat for every child.
2. Will you please fill in the table below with the time allotments in minutes per week for each item listed for your schools? If there is no definite allotment for your schools, then please set down the approximate averages as nearly as you can make them for each item for each grade. If the terms used are not exactly those used in your schools, please try to translate your work into these terms so that summaries and comparisons may be made.

Because of the shortness of time for the work an early reply will be appreciated.

Subjects	Grades	Minutes Per Week						
		1	2	3	4	5	6	7
Opening Exercises								
Reading								
Arithmetic								
Language								
Physical Education								
Geography								
History and Civics								
Drawing or Art								
Spelling								
Music								
Penmanship								
Industrial and Household Arts								
Nature Study or Science—Hygiene								
Recess								
Miscellaneous								
Total minutes per week								

Elementary Education in Cities

CRITERIA FOR JUDGING THE QUALITY OF INSTRUCTION AND OTHER EDUCATIVE INFLUENCES

City..... School..... Grade..... Subjects observed.....

Note: For quality use for: Excellent, Ex.; Very Good, V. G.; Good, G.; Fair, F.; Poor, P. For presence only without quality, check; if absent, omit any mark.

.....I. School and room environment:

-1. Appearance and tone of:a. Rooms.b. Buildings.c. Grounds.
-2. Adaptation of room to needs of living.
-3. Attention to:a. Hygienic factors in living.b. Aesthetic factors.
-4. Degree of adequacy of equipment and teaching facilities.

.....II. Interpreting the curriculum. Courses used:a. State.b. Local.

-1. Teacher's use of judgment and initiative in choice of materials.
-2. Selection of materials:a. Relative to needs and problems of adult life.b. Relative to needs and experiences of children.c. Irrelevant, lacking in definite purpose.
-3. Degree of emphasis upon:a. Knowledge.b. Habits and skills.c. Attitudes and appreciations.
-4. Studies developed:a. As separate subjects with some correlation.b. Entirely as separate subjects.c. Arranged and taught by topics.d. Arranged and taught by projects.
-5. Organization:a. Based upon specific texts.b. Independent of texts.
-6. Provision for special classes of atypical children.

.....III. The teacher's part in the educative process:

-1. Recognition and development of basic educational objectives.

-2. Possession of techniques of:a. Questioning which directs thinking.
....b. Guiding discussion and group activity.c. Establishing habits and skills.d. Cultivating appreciations and ideals.e. Testing results.
-3. Recognition and use of individual interests and abilities.
-4. Encouragement of pupil initiative and judgment of results and values.
-5. Use of practical interests and activities—constructive, investigative, appreciative.
-6. Use of environmental materials, interests and activities.
-7. Personal qualities:a. Personality.b. Scholarship.c. Use of English.
-IV. The pupil's part in the educative process:
 -1. Pupil control of conduct.2. Freedom to initiate.
 -3. Consciousness of the worth of the work he is doing.
 -4. Pupil purposing and planning.5. Growth in cooperation and ability to order his own work.
-V. The spirit of the school:
 -1. Pupil-teacher relationships:a. Wholesome, cordial, stimulating.
....b. Stranded—teacher autocratic, pupils fearful and suppressed.
 -2. General air of:a. Interest, activity, zest, satisfaction.b. Apathy, indifference, boredom.c. Noise, courtesy, antagonism.
 -3. Pupil participation and responsibility relative to order and spirit.
-VI. Promotions:a. Annual.b. Semianual.c. When pupils show readiness.
-VII. Noteworthy features.

SECONDARY EDUCATION

- I. General items:
 - 1. Name of school..... Located at.....
 - 2. Distance from nearest neighboring high school.....
 - 3. Grades included in your school.....
- II. Pupils:
 - 4. Total enrollment by grades 6, 7, 8, 9, 10, 11, 12. Total.....
 - 5. Total graduates in senior high school in spring of 1927.....
 - 6. No. graduates, 1927, who entered college in fall of 1927.....
 - 7. Types of institutions graduates, 1927, are now attending:
 - a. No. in liberal arts colleges.....
 - b. No. in engineering colleges.....
 - c. No. in agricultural colleges.....
 - d. No. in teachers colleges.....
 - e. No. in commercial colleges or schools.....
 - f. No. in other types of schools—What?.....
 - 8. Nonresident pupils, fall 1927:
 - a. Number..... b. Tuition fee charged per month.....
 - 9. Number pupils at present carrying:
 - a. Five full time subjects of study..... In Jr. H. S..... In Sr. H. S.
 - b. Six full time subjects of study.....
 - c. Seven full time subjects of study.....
 - d. Eight full time subjects of study.....
 - e. More than eight full time subjects of study.....
 - 10. How many pupils are known to be:
 - a. Accelerated one full year or more..... Jr. H. S..... Sr. H. S.
 - b. Retarded two full years or more.....

III. Program of studies:

1. In the following list of subjects indicate (1) the number of class sections taught last term, (2) the number of pupils pursuing each subject last term, and (3) the number of pupils failing to secure a passing grade last term.

	No. Sections	No. Pupils	No. Failures		No. Sections	No. Pupils	No. Failures
A. English:				E. Science:			
1st yr.....	Gen. Sci.....	.....	.....	.....
2nd yr.....	Biology.....	.....	.....	.....
3rd yr.....	Physics.....	.....	.....	.....
B. Foreign Lang:				Chem.....	.....	.....	.....
1st yr. Latin.....	Phys. Geog.....	.....	.....	.....
2nd yr. Latin.....	F. Commercial Work:			
1st yr. French.....	Book.....	.....	.....	.....
2nd yr. French.....	Sten.....	.....	.....	.....
1st yr. Spanish.....	Type.....	.....	.....	.....
2nd yr. Spanish.....	Com. Geog.....	.....	.....	.....
C. Social Studies:				Com. Arith.....	.....	.....	.....
Early Eu. Hist.....	Com. Law.....	.....	.....	.....
Civics.....	G. Prac. Arts:			
Mod. Eu. History.....	1st yr. Man. Tr.....	.....	.....	.....
U. S. Hist.....	2nd yr. Man. Tr.....	.....	.....	.....
Prob. of Amer. Dem.....	1st yr. Home Ec.....	.....	.....	.....
D. Math:				2nd yr. Home Ec.....	.....	.....	.....
1st yr. Alge.....	1st yr. Agric.....	.....	.....	.....
2nd yr. Alge.....	2nd yr. Agric.....	.....	.....	.....
Plane Geom.....	Mech. Drawing.....	.....	.....	.....
Solid Geom.....	H. Fine Arts:			

2. What specifically outlined curricula do you provide? (Check)
 General..... Commercial..... Home economics..... College prep.....
 Agric..... Manual train..... Name others.....
3. Do you provide some definite plan of school and vocational guidance.....
4. Indicate, in some detail, type of guidance given, if provided.....

IV. Teachers:

1. Total number teachers employed..... Jr. H. S..... Sr. H. S.....
2. Source of supply (indicate numbers at right):
 a. No. trained in University of Virginia.....
 b. No. trained in William and Mary College.....
 c. No. trained in Virginia teacher colleges.....
 d. No. trained in other Virginia colleges.....
 e. No. trained in institutions outside Virginia.....
3. On a five point scale indicate in the parentheses at the left of question No. 2 above the relative efficiency of teachers from these five types of institutions, putting (1) before the institution which, on the whole, produces the best teachers, (2) before the institution which produces the next best teachers, etc.

4. How many teachers in your present staff?
 a. Attended some summer school 1926..... Jr. H. S..... Sr. H. S.
 b. Attended some summer school 1927..... Jr. H. S..... Sr. H. S.

5. What is the median salary paid your teachers?

6. What does it cost the average or typical teacher in your town for room, board, and local transportation for *one month*?.....

7. The teaching load:
 a. No. teachers teaching one or more subjects for which they have not made specific preparation in college
 b. No. teachers teaching daily more than 150 pupils.....
 c. No. teachers having to prepare to teach more than three distinct classroom lessons daily.....

8. Age of teachers:
 a. No. under 20 years.....
 b. No. between 20 and 25 years.....
 c. No. between 26 and 30 years.....
 d. No. between 31 and 40 years.....
 e. No. over 40 years.....

Signed _____

Official position.....

Higher Institutions: Size of Classes and Student Mortality

Institution _____ Department _____

(By department is meant such a unit as English, physics, law, pathology, etc.)

Give data for all courses or subjects offered in 1926-27, excluding summer and extension.

Higher Institutions: Departmental Salary Budgets

Institution.....

Give for each department total amount spent (or budgeted, if that figure is more easily obtained) for salaries for academic year 1926-27 (excluding summer and extension teaching and excluding special allotments for research, experimental work, etc.). Include salaries of faculty members of all ranks, student assistants, technicians, clerks, etc., whose services are called for by the instruction work of the department.

Departments Listed by Colleges or Schools: Total Salaries as Defined Above

Note.—It may be well to call attention to the fact that faculty members are employed for either nine or eleven months a year, salaries varying accordingly; and also to the fact that the salary schedule provides for increases by number of years of service. In some of the departments the professors are employed for eleven months—especially in the agricultural departments; and in some departments there are men who have reached the maximum salary by years of service. In such cases these two factors operate to raise the total of the departmental salaries somewhat disproportionately.

Higher Institutions: Use of Rooms

Institution

On one sheet give all data for rooms constructed for recitation or lecture purposes.

On another sheet give all data for rooms constructed for laboratory, drawing, study, etc.

Determine the student capacity of each room (number of students to be accommodated at one period) and the number of class hours (55 minute periods) per week each room was scheduled for use during the third term of 1926-27.

Distribute the rooms on the chart below according to the student capacity and periods per week used.

This sheet is for (check which) recitation and lecture rooms.
or laboratory rooms.....

Higher Institutions: Teaching Load

Institution

(By department is meant such a unit as English, physics, law, pathology, etc.)

Give data for all members of the instructional staff of all ranks of instructors and above for second semester 1926-27.

In Column 1, give number of periods per week scheduled to teach in recitation, discussion, and lecture classes.

In Column 2, give number of double laboratory periods per week scheduled.

which the individual rendered 40 percent "incorrect" in Column 4, give an estimate of the percentage which the teaching indicated in Columns 1 and 2 is of the f

In Column 5 give an estimate of the percentage of time directed to "A" administrative duties service which the individual rendered the institution during the semester.

In Column 3, give an estimate or percentage of time devoted to administrative duties. The sum of Columns 4 and 5 must be 100%.

the sum of Commissions + other expenses. The sum of Commissions + other expenses is 100%.

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Column 5

NAME OF MEMBERS OF
THE COMMITTEE

**NAMEs OF MEMBERS OF
INSTRUCTIONAL STAFF**

Higher Educational Institutions: Views of Alumni

The Virginia Educational Commission has instructed the survey staff to make a report concerning the efficiency and economical administration of the higher institutions, including the teacher colleges. It is desired to receive testimony from graduates of these institutions regarding the benefits they have derived from the institution or institutions with which they have been connected. Specific, frank, and accurate statements from graduates will be of great value to the survey staff. It is confidently believed that every one to whom this letter is sent will wish to aid the survey staff in arriving at sound conclusions regarding the quality of the service which each institution is rendering to the State. Whatever testimony any one gives, whether it be favorable or otherwise, will be kept entirely confidential; names of correspondents will not be divulged in any case. Graduates sometimes hesitate to criticise their Alma Mater; but sincere, intelligent criticism is always helpful.

Will you, then, please give testimony as *concretely* and as *definitely* as possible in respect to the following (*an immediate response is necessary in order that your contribution may be used by the survey staff*) :

I.

I have received actual benefits from my college training as follows (please be specific) :

II.

The courses of study I pursued which have proved to be of real value since my graduation are as follows (please state *why* each course has been of value) :

III.

The courses of study I pursued which have not been of value since graduation, so far as I can see, are as follows (please state *why*) :

IV

I have received benefits from influences or experiences outside of classroom, lecture hall, and laboratory as follows (please be specific and definite) :

V

I have had needs since graduation which were not provided for by my Alma Mater, as follows (please be very specific and definite) :

VI

I recommend that the following changes be made (mention concretely changes in required courses, methods of instruction and discipline, etc.) :

My name is.....
My Alma Mater..... My present location.....
Class..... My present occupation.....

Administration and Supervision(Prepared by Fred C. Ayer, Department of Educational Administration,
University of Texas, Austin, Texas.)**DIRECTIONS**

The list of one thousand administrative duties which follows is made up of duties which have been performed and reported upon by principals and superintendents. Your aid is solicited in making a critical analysis of these duties. Read each duty carefully and check it according to the frequency with which you performed it as an administrator during the year June, 1926, to June, 1927. If you did not hold an administrative position this year, check for the last year in which you held such a position.

Indicate in the most appropriate of the four spaces which appear to the right of each duty the number of times that you performed the duty in question. Check duties not performed with a *O*. A sample check of five duties follows:

Duty—	Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
1. Influence people to vote for school building.....
2. Circulate petition to bring about legislation.....
7. Attend board meeting
102. Sort mail for faculty.....
103. Operate mimeograph

The above checking indicates that *Duty 1* was performed once a year; *Duty 2* was not performed; *Duty 7* was performed two times a month; *Duty 102* was performed once a day; and *Duty 103* was performed two times a week. As you check the various duties, use whatever space is most convenient. A duty performed each regular school day is counted as one per day, and a duty performed each month of the regular school year is counted as one per month.

It should be emphasized that your personal contribution will be kept strictly confidential. Be careful to include only those duties actually performed in person last year. Accuracy on the part of the checkers selected is the essence of the success of this research project. Please fill in the personal data on the following page.

PERSONAL DATA

(Bearing on the period from June, 1926, to June, 1927, or on the last year in which you served as a public school administrator.)

you served as a public school administrator.)

1. Name.....
2. State.....
3. City.....
4. Position.....
5. (a) Number of weeks in school year..... (b) Total school enrollment.....
6. Check number years education beyond high school: (a) in normal school or teachers college: (1)..... (2)..... (3)..... (4).....; (b) in college or university: (1)..... (2)..... (4)..... (5)..... (6)..... (7).....
7. Number of years in education work: (a) as elementary teacher.....; (b) high school teacher.....; (c) elementary principal.....; (d) high school principal.....; (e) supervisor of ().....; (f) superintendent of schools; (g) other educational work.....
8. Number of hours per week last year engaged in classroom teaching.....
9. In what grades or subjects?.....
10. Number of teachers under your supervision.....
11. Number of pupils enrolled under your charge.....
12. Number of buildings under your charge.....
13. Indicate the grades included.....
14. Number of office clerks assisting you: Full time....., part time.....
15. Give number and titles of principals or assistant principals who worked under you
16. What supervisors assisted with work under your charge?.....

DIVISION I—GENERAL CONTROL

PART A—BOARD OF EDUCATION POLICY

Indicate in the appropriate space the number of times each duty was performed		Day	Wk.	Mo.	Yr.
Duty—	<i>Executive Cooperation With Board</i>				
1. Influence people to vote for school building.....					
2. Circulate petition to bring about legislation.....					
3. Study school political situation.....					
4. Arrange to have right men run for board.....					
5. Contrive raising money for school needs.....					
6. Confer with members of board.....					
7. Attend board meeting.....					
8. Prepare report for board.....					
9. Prepare inventory for board.....					
10. Study policies of board.....					
11. Recommend items to board for approval.....					
12. Discuss items of policy in board meeting.....					
13. Petition board for special privilege.....					
14. Act as secretary to board.....					
15. Carry on correspondence for board.....					
16. Examine petition from teachers.....					
17. Examine petition from pupils.....					
18. Examine petition from janitors.....					
19. Examine petition from patrons.....					
20. Advise teachers as to policies.....					
21. Study outside reports for board.....					
22. Educate board toward sounder principles.....					
23. Make friendly call on board member.....					
24. Accelerate procedure at board meeting.....					
25. Oppose board proposal.....					
26. Get board member to sponsor new policy.....					
27. Advise board on legal status.....					
28. Receive lobbying delegations.....					
29. Keep board informed on changes.....					
<i>Survey and Publicity</i>					
30. Gather school publicity data.....					
31. Make community industrial survey.....					
32. Make community financial survey.....					
33. Make survey of foreign-born population.....					
34. Make survey of homes.....					
35. Supervise taking of publicity pictures.....					
36. Answer questionnaire.....					
37. Formulate questionnaire.....					
38. Gather data on school problem.....					
39. Conduct local school experiment.....					
40. Cooperate in research project.....					
41. Organize department of research.....					
42. Collect data for questionnaire.....					
43. Prepare annual report.....					
44. Prepare report on night schools.....					
45. Prepare educational slogan.....					
46. Prepare special bulletin.....					

GENERAL CONTROL—CONTINUED

Indicate in the appropriate space the number of times each duty was performed

Day | Wk. | Mo. | Yr.

Duty—

47. Send honor roll to press.....
 48. Arrange local school exhibit.....
 49. Arrange outside school exhibit.....
 50. Arrange pupil performance before civic club.....
 51. Arrange pupil parade.....
 52. Prepare publicity dodgers and posters.....
 53. Supervise taking of publicity pictures.....
 54. Attend to making of publicity cuts.....
 55. Write newspaper publicity article.....
 56. Give interview to reporter.....
 57. Prepare list of teachers for local paper.....
 58. Send list of teachers to State officers.....
 59. Prepare list of graduates for press.....
 60. Prepare athletic schedule for press.....
 61. Send school news home by pupils.....
 62. Advertise for missed census children.....
 63. Report news of school board meeting.....

Cooperative Agencies

64. Arrange with city for playgrounds.....
 65. Announce community activities.....
 66. Serve on library board.....
 67. Consult with library board.....
 68. Consult with city librarian.....
 69. Arrange for private school gardens.....
 70. Consult with traffic officials.....
 71. Consult with health officials.....
 72. Consult with musical organization.....
 73. Consult with Boy Scout Board.....
 74. Consult with fire department.....
 75. Consult with cooperative business organization.....
 76. Consult with religious organization.....
 77. Sanction parent-teacher enterprise.....
 78. Administer outside use of school property.....
 79. Arrange for cooperative Christmas giving.....

PART B—ADMINISTRATIVE ORGANIZATION

School Board Organization

80. Supply board with literature.....
 81. Study forms of school board organization.....
 82. Get board to modify organization.....
 83. Prepare rules for board meeting procedure.....
 84. Construct order for business for chairman.....
 85. Persuade board to adopt code of ethics.....

Educational Organization

86. Reorganize school (e.g., 8-4 to 6-6 plan).....
 87. Organize a summer school.....

GENERAL CONTROL—CONTINUED

Duty—	Indicate in the appropriate space the number of times each duty was performed			
	Day	Wk.	Mo.	Yr.
88. Organize a junior high school.....				
89. Organize platoon school.....				
90. Organize night school.....				
91. Organize departmental teaching in grades.....				
92. Organize ability sectioning or grouping.....				
93. Study reorganization plans.....				
<i>Business and Financial Organization</i>				
94. Persuade board to adopt budget plan.....				
95. Organize budget plan.....				
96. Organize new system of accounting.....				
<i>Miscellaneous Rules and Regulations</i>				
97. Prepare rules and regulations.....				
98. Prepare inventory and estimate blanks.....				
99. Prepare school directory.....				
100. Prepare teachers' handbook.....				
101. Prepare principals' handbook.....				

DIVISION II—EXECUTIVE MANAGEMENT

PART A—OFFICE MANAGEMENT AND ROUTINE

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
102. Sort mail for faculty.....				
103. Deliver mail.....				
104. Open mail.....				
105. Read mail.....				
106. Write letters.....				
107. Dictate letters.....				
108. Sign letters.....				
109. Give instruction to stenographer.....				
110. Assign work to office force.....				
111. Show janitor how to clean mimeograph.....				
112. Show teachers how to operate mimeograph.....				
113. Instruct student assistant in office work.....				
114. Schedule dates for school auditorium.....				
115. Deliver pay to substitute janitor.....				
116. Write announcements.....				
117. Deliver message to teachers.....				
118. Call teacher to phone.....				
119. Use telephone.....				
120. Administer correspondence examinations.....				
121. Use typewriter.....				
122. Cut stencil.....				
123. Operate mimeograph.....				
124. Employ school clerks.....				
125. Assign school clerks.....				
126. File papers.....				
127. Supervise assembling, passing, and dismissing.....				
128. Keep calendar up to date.....				
129. Keep daily program book.....				
130. Assign lockers				
131. Make daily program of special duties.....				
132. Keep school-day office hours.....				
133. Keep Saturday office hours.....				
134. Make out honor roll.....				
135. Place visiting teachers.....				
136. Introduce visitor to teachers.....				
137. Take care of lost and found articles.....				
138. Order diplomas				
139. Prepare diplomas.....				
140. Sign diplomas.....				
141. Present diplomas.....				
142. Receive callers				
143. Make bulletin board.....				
144. Keep charge of bulletin board.....				
145. Go to postoffice.....				
146. Write literary gems on blackboard.....				
147. Send students on errands.....				
148. Make out attendance certificates.....				
149. Make out achievement certificates.....				
150. Give pupils permission to make announcements.....				

EXECUTIVE MANAGEMENT—CONTINUED

PART B—COMMUNITY MANAGEMENT

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
<i>Relations with Parents</i>				
151. Read note from parents.....				
152. Answer note from parents.....				
153. Visit homes to meet parents.....				
154. Encourage parents to visit school.....				
155. Notify parents of visiting day.....				
156. Report difficulty with parent to board.....				
157. Notify parents of school opening.....				
158. Investigate complaints of parents.....				
159. Adjust complaints of parents.....				
160. See parents about absent pupils.....				
161. Make acquaintance of patrons.....				
162. Notify parents of child's bad habits.....				
163. Telephone parents regarding pupil's status.....				
164. Promote fathers' and sons' banquet.....				
165. Entertain parents during evening.....				
166. Confer with Mothers' Club.....				
167. Send "poor work" slips to parents.....				
168. Help parents choose book sets.....				
169. Settle parent-teacher disagreement.....				
170. Secure library books for parents.....				
171. Organize Parent Teachers Association.....				
172. Attend meeting of P. T. A.....				
173. Supervise work of P. T. A.....				
174. Serve on committee of P. T. A.....				
175. Speak at P. T. A. meeting.....				
176. Serve as officer of P. T. A.....				
177. Secure speaker for P. T. A.....				
178. Announce meeting of P. T. A.....				
<i>Welfare Duties</i>				
179. Speak at church brotherhood meeting.....				
180. Speak at Boy Scout meeting.....				
181. Speak at Y. M. C. A.....				
182. Take part in Hi Y work.....				
183. Take part in Boy Scout work.....				
184. Confer with leader of Girl Reserves.....				
185. Help in church music.....				
186. Teach Sunday school class.....				
187. Participate in young people's religious meeting.....				
188. Arrange Red Cross campaign.....				
189. Arrange bundle day campaign.....				
190. Help direct child welfare club.....				
191. Help get clothing for needy children.....				
192. Attend religious meeting.....				
193. Get names of poor children.....				
194. Attend church social function.....				
195. Assist with summer Bible School.....				
196. Fill absent pastor's pulpit.....				

EXECUTIVE MANAGEMENT—CONTINUED

Duty—	Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
197. Talk before community organization.....					
198. Attend meeting of civic club.....					
199. Cooperate with Farm Bureau.....					
200. Promote community economic enterprise.....					
201. Arrange social entertainment.....					
202. Preside at public meeting.....					
203. Assist citizens prepare papers and addresses.....					
204. Plan gala day decorations.....					
205. Serve on local lyceum course.....					
206. Promote Americanization Week.....					
207. Arrange community picnic.....					
208. Promote Community Day program.....					
209. Take part in community plan.....					
210. Supervise sale of Red Cross seals.....					
211. Schedule events for community hall.....					
212. Promote drive to raise improvement moneys.....					
213. Assist community chest workers.....					
PART C—PROFESSIONAL STATUS AND MISCELLANEOUS DUTIES					
<i>Professional Status and Improvement</i>					
214. Take professional extension course.....					
215. Attend summer school.....					
216. Visit outside schools.....					
217. Take academic extension course.....					
218. Read optional professional literature.....					
219. Do prescribed reading circle work.....					
220. Read religious literature.....					
221. Practice in special fields (e. g., music, speaking, handwriting).....					
222. Write magazine article on school work.....					
223. Study school law.....					
224. Attend local school conference.....					
225. Attend State education meeting.....					
226. Attend county educational meeting.....					
227. Attend superintendent's section of the N. E. A.....					
228. Serve on educational committee.....					
229. Serve as officer in educational organization.....					
230. Apply for new position.....					
231. Investigate new position.....					
232. Prepare paper for educational meeting.....					
233. Hold membership in local and professional organization.....					
234. Hold membership in county professional organization.....					
235. Hold membership in State professional organization.....					
236. Hold membership in National professional organization.....					
237. Improve by travel.....					
238. Keep record catalogue of educational literature and materials.....					
239. Organize a professional library.....					
240. Serve on staff of educational journal.....					
241. Serve on State or county board.....					

EXECUTIVE MANAGEMENT—CONTINUED

Duty—	Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
	<i>Miscellaneous Executive Duties</i>				
242. Solicit tuition pupils.....					
243. Complete absent teacher's report.....					
244. Confer with traffic officer.....					
245. Walk to various schools in district.....					
246. Drive car on school business.....					
247. Award trophies.....					
248. Do detective work.....					
249. Examine sample of school work sent to office.....					
250. Confer with superintendent.....					
251. Confer with elementary principal.....					
252. Confer with secondary principal.....					
253. Notify fire department of fire.....					
254. Conduct visitors through schools.....					
255. Direct care of school visitors.....					
256. Entertain visitors.....					
257. Prepare letter of sympathy.....					
258. Loan books.....					
259. Make record of books loaned.....					
260. Facilitate inspection by county and State officers.....					
261. Make report for U. S. Bureau of Education.....					
262. Meet with county board.....					
263. Confer with State officers.....					
264. Confer with county officers.....					
265. Solicit town for prizes.....					
266. Supervise soliciting among the student body.....					
267. Conduct thrift campaign.....					
268. Prevent agent canvassing school.....					
269. Make report for county superintendent.....					
270. Make special State report.....					

DIVISION III—BUSINESS MANAGEMENT

PART A—FINANCIAL ACCOUNTING AND MANAGEMENT

Indicate in the appropriate space the number of times each duty was performed

Day Wk. Mo. Yr.

Duty—

Fiscal Management

271. Make out tentative school budget.....
 272. Have budget approved by board.....
 273. Have school budget printed.....
 274. Prepare fiscal calendar.....
 275. Keep budget ledger.....
 276. Prepare application for regular State appropriation.....
 277. Prepare application for special subvention (Smith-Hughes, et al).....
 278. Arrange for loans to school district.....
 279. Prepare annual financial report.....
 280. Prepare statement of income and disbursements.....
 281. Prepare statement showing expenditures by buildings.....
 282. Prepare statement showing expenditures by functions.....
 283. Prepare monthly balances of appropriations.....
 284. Prepare annual report on school property.....
 285. Estimate tuition rates.....
 286. Plan bond issue.....
 287. Have papers executed for bond issue.....
 288. Post notice of bond issue.....
 289. Administer sale of bonds.....

Payroll and Cash Accounting

290. Arrange payrolls.....
 291. Adjust salaries for absences.....
 292. Keep payroll ledger.....
 293. Distribute pay checks.....
 294. Issue warrants.....
 295. Arrange with banks to cash warrants.....
 296. Act as treasurer for school cafeteria.....
 297. Act as treasurer for school clubs.....
 298. Act as treasurer for school athletic associations.....
 299. Act as treasurer for school publications.....
 300. Make bank deposits.....
 301. Collect rents.....
 302. Receive and return deposits of bidders.....
 303. Collect tuition.....
 304. Check petty cash.....
 305. Prepare statement of cash income and disbursements.....
 306. Prepare tuition statement.....
 307. File vouchers.....
 308. Keep accounts payable ledger.....
 309. Handle special funds (e. g., Christmas seal money).....

Supervision of Work

310. Supervise leveling and grading playground.....
 311. Determine placement of equipment.....
 312. Install new equipment.....
 313. Plan additions to stationary equipment.....

BUSINESS MANAGEMENT—CONTINUED

PART B—THE SCHOOL PLANT—FACILITIES AND EQUIPMENT

Indicate in the appropriate space the number of times each duty was performed

Day Wk. Mo. Yr.

Duty—

314. Plan major repairs.....
 315. Supervise major repairs.....
 316. Direct emergency repairs.....
 317. Get school plant in order for new term.....
 318. Record job costs of repairs.....
 319. Check job cost sheets.....
 320. Standardize repair costs.....
 321. Plan summer repairs.....
 322. Purchase equipment replacements.....

Selection and Purchase of Supplies

323. Interview salesmen of supplies.....
 324. Order textbooks.....
 325. Report data to book companies.....
 326. Study price and quality of supplies.....
 327. Check receipts of supplies.....
 328. Check bills for supplies.....
 329. Pay bills for supplies.....
 330. Arrange printing and distribution of tickets, programs, etc.....
 331. Look after delayed orders.....
 332. Purchase supplies for home economics department.....
 333. Purchase supplies for manual training department.....
 334. Purchase supplies for lunch rooms.....
 335. Purchase athletic supplies and equipment.....
 336. Secure bids on supplies.....
 337. Submit bids to board of education for selection.....
 338. Keep register for purchases of supplies.....
 339. Charge purchases against available appropriation.....

Care of Books and Supplies

340. Inspect textbooks and supplies.....
 341. Collect fines for misuse of books and supplies.....
 342. Report on State textbooks owned by district.....
 343. Look after janitor supplies.....
 344. Take care of musical instruments.....

Distribution of Books and Supplies

345. Determine placement of supplies.....
 346. Distribute supplies to teachers.....
 347. Keep record of distribution of supplies.....
 348. Make inventory of school supplies.....
 349. Distribute supplementary reading materials.....
 350. Supply schools with health and play equipment.....
 351. Schedule motion picture exhibitions.....
 352. Administer use of lanterns and slides.....

BUSINESS MANAGEMENT—CONTINUED

PART C—THE SCHOOL PLANT—OPERATION AND MAINTENANCE

Indicate in the appropriate space the number of times each duty was performed

Day Wk. Mo. Yr.

Duty—

Inspection and Supervision of Janitorial Service

353. Inspect janitor work.....
 354. Assist janitor make reports.....
 355. Show janitor how to operate apparatus.....
 356. Help janitor in arrangement of maps, chairs, pictures, etc.....
 357. Employ janitor.....
 358. Discharge janitor.....
 359. Secure substitute janitor.....
 360. Check janitor's report.....
 361. Arrange course for janitors.....
 362. Teach janitor course.....
 363. Notify janitor of special use of buildings.....
 Confer with janitors about:
 364. Legal methods of cleaning.....
 365. Laws regarding condition of buildings.....
 366. Part of building that needs cleaning.....
 367. Keeping playgrounds clean.....
 368. Moving heavy object.....
 369. Leaks in pipes.....
 370. Ringing bells.....
 371. Preparation of building for exhibition or entertainment.....
 372. Condition of rooms.....

Inspection and Care of Building and Equipment

373. Supervise heating, lighting, and ventilation.....
 374. Inspect defacement of school building.....
 375. Supervise beautifying of school rooms.....
 376. Inspect service department.....
 377. Inspect toilets.....
 378. Wind and set clocks.....
 379. Regulate clock and signal system.....
 380. Set up or adjust seats.....
 381. Substitute for janitor.....

Inspection and Care of School Grounds

382. Assist in cleaning school grounds.....
 383. Supervise cleaning of school grounds.....
 384. Supervise landscaping of school yards.....
 385. Supervise school garden work.....
 386. Care for plants and flowers.....
 387. Supervise Arbor Day tree planting.....

PART D—EXPANSION

Building Programs and Surveys

388. Score existing buildings.....
 389. Prepare report on existing buildings.....
 390. Compute school population growth.....

BUSINESS MANAGEMENT—CONTINUED

	Indicate in the appropriate space the number of times each duty was performed			
Duty—	Day	Wk.	Mo.	Yr.
391. Study transportation facilities.....				
392. Establish boundaries for new schools.....				
393. Secure fire insurance for buildings.....				
394. Estimate size and location of new buildings.....				
395. Secure estimates as to cost of building sites.....				
396. Study building plans.....				
397. Draw tentative plans for buildings.....				
398. Recommend modifications of old buildings.....				
399. Recommend types of new buildings.....				
400. Prepare plan of financing building program.....				
401. Prepare estimate of cost of maintenance.....				
402. Study law on school bond issues.....				
403. Employ architect.....				
404. Consult architect.....				
405. Check architect's plans.....				
<i>Construction</i>				
406. Select building site.....				
407. Obtain options on site.....				
408. Purchase building site.....				
409. Locate building on site.....				
410. Advertise for builders' bids.....				
411. Accept bond of successful bidder.....				
412. Appoint inspector.....				
413. Personally inspect building during construction.....				
414. Keep record of progress of construction.....				
415. Make payments on building.....				
416. Record payments made on buildings.....				
<i>New Equipment</i>				
417. Estimate cost of equipment.....				
418. Make specifications for equipment.....				
419. Prepare bidders' lists.....				
420. Attend correspondence with bidders.....				
421. Open bids—tabulate results.....				
422. Arrange meeting for presentation of samples.....				
423. Recommend bids.....				

DIVISION IV—THE TEACHING STAFF

Duty—	Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—	<i>Personal Welfare of Teachers</i>				
424. Initiate new teacher.....					
425. Confer with teacher on personal welfare.....					
426. Assist teacher secure boarding place.....					
427. Assign teachers.....					
428. Reassign failing teacher.....					
429. Look after health of teachers.....					
430. Encourage worried teacher.....					
431. Administer teacher's request.....					
432. Arrange for care of ill teacher.....					
433. Provide rest-room facilities for teachers.....					
434. Help teachers improve community standing.....					
435. Promote cordial relations with teachers.....					
436. Ask advice from teachers.....					
437. Entertain teachers.....					
438. Promote cooperation among teachers.....					
439. Admonish teachers on sanitary and suitable clothing.....					
440. Adjust teacher's financial problem.....					
441. Investigate criticism of teacher.....					
442. Advise teacher on social and moral conduct.....					
443. Arrange picnic or excursion for teachers.....					
444. Encourage teachers to ask for advice.....					
445. Notify teachers of school opening.....					
446. Discipline teacher.....					
447. Check school arrival of teachers.....					
448. Check extra work done by teachers.....					
449. Check health certification of teachers.....					
450. Protect teachers from agent.....					
451. Meet teacher at train upon arrival.....					
452. Organize committee to take care of new teachers.....					
453. Administer teacher's connection with retirement fund.....					
454. Send Christmas letter or gifts to teachers.....					
Duty—	<i>Employment of Teachers</i>				
455. Consider applications.....					
456. Interview applicant.....					
457. Examine credentials of applicants.....					
458. Send inquiry blank concerning applicant.....					
459. Visit class of applicant.....					
460. Give examination to applicant.....					
461. Give intelligence test to applicant.....					
462. Select principal.....					
463. Select supervisor.....					
464. Select regular teachers.....					
465. Select special teachers.....					
466. Notify teachers of election.....					
467. Recommend list of teachers to board.....					
468. Consult principal in employment of teachers.....					
469. Consult supervisor on employment of teacher.....					
470. Transfer teacher.....					
471. Promote teacher.....					

THE TEACHING STAFF—CONTINUED

Indicate in the appropriate space the number of times each duty was performed

Day Wk. Mo. Yr.

Duty—

472. Demote teacher.....
 473. Secure resignation or discharge of teacher.....
 474. Introduce teacher to board members.....
 475. Restrict number of home and married teachers.....
 476. Notify teacher of dismissal.....
 477. Check certification of teachers.....
 478. File teachers' certificates with proper authority.....
 479. Interpret laws regarding certification.....
 480. Interpret laws regarding retirement.....
 481. Secure substitute teacher.....
 482. Formulate salary schedule.....
 483. Study salary schedule in other cities.....
 484. Issue teachers' contracts.....
 485. Help teacher secure new position.....
 486. Fill in inquiry concerning teacher.....
 487. Recommend bonus for superior teachers.....
 488. Visit teacher training institution.....
 489. Solicit teachers from teacher employment agency.....
 490. Solicit teachers from teacher training institution.....

Professional Improvement of Teachers

491. Suggest professional books to teachers.....
 492. Suggest current magazine articles for reading.....
 493. Prepare bibliography for teachers.....
 494. Organize professional library.....
 495. Provide professional magazines.....
 496. Arrange for extension classes.....
 497. Enroll teachers in teacher organization.....
 498. Aid teachers in extension work.....
 499. Rate teachers.....
 500. Explain items used in teacher rating.....
 501. Discuss results of rating with teacher.....
 502. Recommend professional courses to teachers.....
 503. Help teacher prepare professional paper.....
 504. Arrange leave of absence for teacher.....
 505. Advise teachers on team-work qualities.....
 506. Advise teacher on personal appearance.....
 507. Arrange for attendance at institute.....
 508. Conduct institute.....
 509. Encourage teachers to experiment.....

DIVISION V—THE PUPILS

Indicate in the appropriate space the number of times each duty was performed

Day Wk. Mo. Yr.

Duty—

Census and Attendance

510. Take census of district.....				
511. Make summary of census.....				
512. Supervise taking of census.....				
513. Enroll children of school age.....				
514. Tabulate census information for school use.....				
515. Keep register.....				
516. Instruct teacher in use of register.....				
517. Keep summary record of attendance.....				
518. Make school population map of city.....				
519. Check attendance with enrollment.....				
520. Check enrollment with census.....				
521. Study attendance data from other cities.....				
522. Investigate claim for exemption from attendance.....				
523. Investigate privately tutored children.....				
524. Check attendance in part time schools.....				
525. Make graphs showing attendance.....				
526. Make special drive promoting attendance.....				
527. Classify nonattendance by grades, buildings, etc.....				
528. Check excuses for absence.....				
529. Check excuses for tardiness.....				
530. Check class cuts.....				
531. Interpret compulsory attendance laws.....				
532. Ascertain pupils of school age not in school.....				
533. Investigate pupil attendance in private schools.....				
534. Examine reports of attendance officer.....				
535. Ascertain causes of truancy.....				
536. Employ truant officer.....				
537. Classify nonattendance by grades, buildings, etc.....				
538. Act as truant officer.....				
539. Notify parents of child's truancy.....				
540. Call on parents of truant child.....				
541. Admonish tardy pupils.....				
542. Issue early dismissal permits.....				
543. Issue absence permits.....				
544. Issue tardy permits.....				
545. Sign excuses of pupils.....				
546. Issue permits to get classrooms.....				
547. Examine report from juvenile officer.....				

Classification

548. Determine eligibility of pupils.....				
549. Schedule pupils.....				
550. Direct students to rooms.....				
551. Assign children to different schools.....				
552. Direct special groupings.....				
553. Redistribute crowded grades.....				
554. Arrange for institutional children.....				
555. Organize ungraded class.....				
556. Organize opportunity class.....				
557. Make preclassification estimates.....				

THE PUPILS—CONTINUED

Indicate in the appropriate space the number of times each duty was performed

Day | Wk. | Mo. | Yr.

Duty—

558. Make grade distribution sheets.....
 559. Make special promotions.....
 560. Assign credit for outside instruction (e. g., music).....
 561. Assign credits to entering pupils.....
 562. Investigate need for special classes.....
 563. Assign children to special classes.....
 564. Placate parents of special children.....
 565. Transcribe credits for graduates and leaving pupils.....

Promotion and Progress

566. Collect age-grade data.....
 567. Construct age-grade elimination table.....
 568. Construct age-grade enrollment table.....
 569. Construct age-progress table.....
 570. Construct mental age-grade table.....
 571. Compute acceleration and retardation statistics.....
 572. Recommend tutor for backward pupil.....
 573. Issue rules for promotion.....
 574. Pass on doubtful cases of promotion.....
 575. Check double promotions.....
 576. Arrange with pupils to do extra or double work.....
 577. Sanction pupil taking less than regular work.....
 578. Promote drive on reducing failure and retardation.....
 579. Secure employment of "visiting teacher".....
 580. Organize auxiliary teaching.....
 581. Study effects of late entrance and nonattendance.....
 582. Make a record of wage earning opportunities.....
 583. Organize language class for foreign children.....
 584. Secure employment for pupil.....
 585. Issue work permit.....

Reports and Records

586. Fill in pupil report cards.....
 587. Sign pupil report cards.....
 588. Send pupil report cards to parents.....
 589. See that cards are signed by parents.....
 590. Construct new type of pupil report card.....
 591. Assemble and file pupil report cards.....
 592. Fill in permanent individual record cards.....
 593. Fill in pupil health records.....
 594. Establish uniform marking system.....
 595. Examine teacher's marks.....
 596. Construct summary table of marks given.....
 597. Assign credits to entering pupils.....
 598. Make transcripts of credits to leaving pupils.....
 599. Fill in transfer cards.....
 600. Make report on employed children.....
 601. Make attendance report.....
 602. Make health report.....
 603. Make retardation report.....

THE PUPILS—CONTINUED

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
604. Make promotion report.....				
605. Make preclassification report.....				
606. Keep transfer record.....				
607. Compute comparative school records of graduates.....				
<i>Discipline</i>				
608. Investigate disciplinary cases.....				
609. Suspend pupil.....				
610. Expel pupil.....				
611. Administer corporal punishment.....				
612. Adjust pupils' grievances and complaints.....				
613. Interview pupils referred by teachers.....				
614. Interview pupils regarding outside disturbance.....				
615. Adjust class scrap.....				
616. Prevent smoking on school premises.....				
617. Organize gymnasium discipline.....				
618. Organize hall discipline.....				
619. Organize playground discipline.....				
620. Maintain order in assembly.....				
621. Take care of interfering outsider.....				
622. Record cases of punishment.....				
623. Give publicity to traffic laws.....				
624. Instruct teachers in disciplinary procedure.....				
625. Direct general conduct of children on way to and from school.....				
626. Appear in juvenile court with delinquent child.....				
627. Decide disciplinary penalties.....				
628. Adjust difference between teacher and pupil.....				
629. Organize system of student self government.....				

DIVISION VI—THE CURRICULUM AND SPECIAL ACTIVITIES

PART A—THE CURRICULUM

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
<i>Aims</i>				
630. Construct list of general educational objectives.....				
631. Construct list of special course objectives (e. g., arithmetic, botanical).....				
632. Study community needs for curriculum changes.....				
633. Ascertain changes desired by school patrons.....				
634. Eliminate invalid objectives from printed course of study.....				
635. Keep record of what graduates do.....				
636. Keep record of what drop-outs do.....				
637. Study language needs of pupils.....				
<i>Textbooks</i>				
638. Examine textbooks for adoption.....				
639. Select textbooks for adoption.....				
640. Distribute textbooks to teachers for try-out or examination.....				
641. Meet with committee on textbooks.....				
642. Confer with textbook agent.....				
643. Keep library of sample textbooks.....				
644. Write textbook.....				
645. Serve on county textbook commission.....				
646. Serve on State textbook commission.....				
647. Write testimonial for textbook.....				
<i>Schedule Management</i>				
648. Help principal make out class schedule.....				
649. Assist principal in making program of studies.....				
650. Plan examination schedule.....				
651. Plan schedule for special activities.....				
652. Arrange schedule to take care of epidemic.....				
653. Prepare time allotment schedule.....				
654. Provide teachers sample daily programs.....				
655. Help teacher make out daily program.....				
656. Check teachers' classroom schedules.....				
657. Organize plan for supervised study.....				
658. Assign extra-curricular activities.....				
659. Distribute teachers' loads.....				
660. Assign yard and hall duties.....				
661. Assign subjects and rooms.....				
662. Organize plan for home study.....				
663. Notify staff of school opening.....				
664. Notify press of school opening.....				
665. Issue instructions for opening school.....				
666. Issue instructions for closing school.....				
667. Instruct teachers in registration duties.....				
668. Prepare and distribute calendar for school year.....				
<i>Curriculum Building</i>				
669. Read literature on curriculum construction.....				
670. Examine outside courses of study.....				

THE CURRICULUM AND SPECIAL ACTIVITIES—CONTINUED

Duty—	Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
671. Study local curriculum for defects.....					
672. Prepare list of curriculum construction principles.....					
673. Explain curriculum to principals and teachers.....					
674. Organize teachers for curriculum revision.....					
675. Meet with committee on curriculum revision.....					
676. Secure outside help in curriculum revision.....					
677. Construct course of study.....					
678. Make supplementary course outlines.....					
679. Get course of study approved.....					
680. Modify curriculum to fit teaching staff.....					
681. Review and integrate curriculum revision results.....					
682. Edit writing of courses of study.....					
683. Arrange printing of course of study.....					
684. Correct proof of course of study.....					
685. Organize try-outs of new courses.....					
686. Make plans for continuous curriculum construction.....					
687. Construct list of subjects or grade attainments.....					
688. Construct set of achievement standards.....					
689. Assist in new county or State course of study.....					
<i>Extension</i>					
690. Organize community center activities.....					
691. Supervise community center activities.....					
692. Organize night school.....					
693. Conduct night school.....					
694. Organize summer school.....					
695. Conduct summer school.....					
696. Organize evening entertainment.....					
697. Advertise evening program.....					
698. Supervise school fair.....					
699. Arrange for pupil attendance at public lectures.....					

THE CURRICULUM AND SPECIAL ACTIVITIES—CONTINUED

PART B—SPECIAL ACTIVITIES

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
<i>Student Organizations</i>				
700. Act as faculty advisor.....				
701. Attend student meeting.....				
702. Conduct literary society.....				
703. Organize honor society.....				
704. Organize boys' club.....				
705. Organize glee club.....				
706. Make trip with glee club.....				
707. Organize debating club.....				
708. Conduct debating club.....				
709. Make trip with debating club.....				
710. Provide for debate officials.....				
711. Promote outside activities for students.....				
712. Supervise class organization.....				
713. Appoint sponsors for classes.....				
714. Supervise selection of memorial gift.....				
715. Organize school bank.....				
716. Organize school store.....				
717. Restrict secret society.....				
718. Organize accounting system for student organization.....				
<i>Athletic Activities</i>				
719. Establish athletic policy.....				
720. Supervise athletic contest.....				
721. Attend athletic game.....				
722. Coach athletic team.....				
723. Make trip with athletic team.....				
724. Take part in athletics.....				
725. Officiate in athletic contest.....				
726. Secure officials for athletic game.....				
727. Arrange athletic schedule.....				
728. Arrange for transportation of team.....				
729. Serve county athletic association.....				
730. Devise means of raising athletic moneys.....				
731. Administer athletic letters for team.....				
732. Mark athletic grounds.....				
733. Promulgate county track and field meet.....				
734. Give talk at pep meeting.....				
735. Act as host to visiting team.....				
<i>Social Activities</i>				
736. Attend socials, parties, programs, etc.....				
737. Supervise conduct of school parties.....				
738. Chaperone students.....				
739. Establish rules for class parties.....				
740. Schedule school parties.....				
741. Assist student prepare toast.....				

THE CURRICULUM AND SPECIAL ACTIVITIES—CONTINUED

Indicate in the appropriate space the number of times each duty was performed

Day Wk. Mo. Yr.

Duty—

School Publications

- 742 Select editors.....
 743. Edit school publication.....
 744. Supervise school publication.....
 745. Write article for school publication.....
 746. Read proof for school publication.....

Assemblies

747. Plan assembly.....
 748. Conduct assembly.....
 749. Conduct flag raising.....
 750. Assign seats in assembly.....
 751. Supervise marching.....
 752. Give inspirational talk at assembly.....
 753. Operate moving picture machine for assembly.....
 754. Get speakers to address assemblies.....
 755. Introduce speakers.....
 756. Lead assembly singing.....
 757. Recite the Lord's Prayer.....
 758. Entertain school speakers.....
 759. Secure entertainment for school speaker.....
 760. Help pupils find material for program.....
 761. Select students for contest.....
 762. Supervise decoration of assembly room.....
 763. Take care of seating arrangements.....
 764. Attend interschool literary contest.....
 765. Act as judge in school contest.....
 766. Administer spelling contest.....
 767. Speak at special programs.....
 768. Present prizes to winners.....
 769. Provide for Special School Day.....
 770. Provide for Educational Week.....

Graduation Programs

771. Select minister for baccalaureate.....
 772. Obtain commencement speaker.....
 773. Have commencement printing done.....
 774. Drill seniors for graduation exercises.....
 775. Conduct graduation exercises.....
 776. Secure music for commencement.....
 777. Make out program for commencement.....
 778. Help decorate for commencement.....

DIVISION VII—INSTRUCTION

PART A—TEACHING AND TESTING

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
<i>Teaching Contacts</i>				
779. Teach subject in high school regularly.....				
780. Teach class in elementary school regularly.....				
781. Act as substitute teacher in high school.....				
782. Act as substitute teacher in elementary school.....				
783. Instruct pupils in methods of study.....				
784. Provide for group study classes.....				
785. Direct supervised study.....				
786. Confer with pupils on makeup work.....				
787. Supervise pupil project.....				
788. Supervise laboratory period.....				
789. Teach students how to use new books.....				
<i>Classroom Management</i>				
790. Distribute laboratory materials.....				
791. Distribute classroom materials.....				
792. Adjust desks for individual pupils.....				
793. Inspect rooms as to seating arrangement.....				
794. Study arrangement of materials and equipment.....				
795. Inspect routine of passing materials, moving to blackboard, etc.....				
796. Provide teachers' list of room materials, books, etc.....				
<i>Administration of Tests</i>				
797. Assemble and study sample tests.....				
798. Keep file of sample tests.....				
799. Study test procedure.....				
800. Organize testing program.....				
801. Explain purpose of testing program.....				
802. Train teachers to give tests.....				
803. Train teachers to score and tabulate tests.....				
804. Train clerical help to score and tabulate tests.....				
805. Construct special test.....				
806. Help teachers improve written examinations.....				
807. Arrange examination schedule.....				
808. Supervise giving of test.....				
809. Prepare general examination.....				
810. Select exemptions from examinations.....				
811. Score test papers.....				
812. Grade examination papers.....				
813. Administer individual test.....				
814. Administer group test.....				
815. Administer entrance examinations.....				
816. Serve on county examining board.....				
817. Administer State and county examinations.....				
818. Administer final examinations.....				
819. Supervise and check work of scorers.....				
820. Report results to publishers of tests or test bureau.....				
821. Explain practice tests to teachers.....				

INSTRUCTION—CONTINUED

Indicate in the appropriate space the number of times each duty was performed

Day | Wk. | Mo. | Yr.

Duty—

Diagnosis and Interpretation

822. Make statistical analysis of test results.....
 823. Determine weekly grade averages.....
 824. Make illustrative graphs of test results.....
 825. Classify scores.....
 826. Make comparative study of results in other cities.....
 827. Compute I. Q.'s or similar relations.....
 828. Study types of errors.....
 829. Assemble list of remedial devices.....
 830. Explain remedial devices to teachers.....
 831. Interview pupils about test scores.....
 832. Arrange special and individual instruction.....
 833. Study teaching efficiency as shown by test results.....
 834. Reclassify pupils on basis of testing.....
 835. Organize special classes.....

PART B—SUPERVISION

Principals and Supervisors

836. Serve as principal.....
 837. Prepare set of supervision objectives.....
 838. Prepare plan of supervision.....
 839. Check supervisory results.....
 840. Plan meetings of supervisory staff.....
 841. Direct meetings of supervisory staff.....
 842. Attend meetings of supervisory staff.....
 843. Inspect principal's office and building procedure.....
 844. Consult principal with reference to his work.....
 845. Consult supervisor with reference to work.....
 846. Rate principals and supervisors.....

Technique of Teaching

847. Discuss aims of teaching with teachers.....
 848. Show teachers how to achieve aims.....
 849. Show teachers how to guide pupils into purposeful activities.....
 850. Help teachers provide for individual differences.....
 851. Observe teacher's classroom procedure.....
 852. Criticize teacher's classroom procedure.....
 853. Keep record of visits.....
 854. Help teachers improve study habits of pupils.....
 855. Suggest desirable changes as to assigned home work.....
 856. Give instructions how to conduct short drives for mastery.....
 857. Suggest how to conduct various types of lessons (e. g., drill).....
 858. Suggest desirable changes in ways of assigning lessons.....
 859. Suggest improved special devices.....
 860. Make a list of changes in methods to be bought.....
 861. Arrange for demonstration lesson.....
 862. Give demonstration lesson.....
 863. Suggest plan of pupil individual progress.....
 864. Suggest plan of pupils' budgeting work.....

INSTRUCTION—CONTINUED

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
865. Suggest plan for supervised study.....				
866. Make a study of pupils' study habits.....				
867. Investigate the values of special devices.....				
868. Suggest plan of self-testing by pupils.....				
869. Assist teachers find materials.....				
870. Prepare an outline for lesson planning.....				
871. Look over lesson plans of teachers.....				
872. Prepare an outline of lesson plans for illustration.....				
873. Help teachers plan projects.....				
874. Write abstract of article on teaching.....				
875. Supervise work of private teachers.....				
<i>Conferences and Meetings</i>				
876. Hold conferences with individual teacher.....				
877. Hold group conference.....				
878. Keep a record of conferences.....				
879. Plan outline of teacher meeting topics.....				
880. Conduct teachers' meetings.....				
881. Send out advance brief of topics.....				
882. Arrange for teacher visitation in local schools.....				
883. Arrange for teacher visitation in outside schools.....				
884. Have teacher report on observations.....				

DIVISION VIII—SPECIAL SERVICES

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr
Duty—				
<i>Supervision of Playground</i>				
885. Teach new games.....				
886. Overse playground equipment.....				
887. Stop fights and quarrels on playground.....				
888. Select healthful games.....				
889. Assign playground duties to teachers.....				
890. Help teachers on playground at recess.....				
891. Promote special contest.....				
892. Engage in play activities.....				
893. Schedule recitation periods for play.....				
<i>Supervision of Lunch Period</i>				
894. Organize lunch period.....				
895. Supervise matron in charge.....				
896. Order milk for pupils.....				
897. Persuade children to eat lunch.....				
898. Observe children during lunch hour.....				
899. Check menu for school lunch.....				
900. Check number of pupils ordering lunch.....				
901. See that pupils use correct manners.....				
<i>Special Health Service</i>				
902. Give first aid.....				
903. Exclude sick pupils from classes.....				
904. Persuade pupils to stay out of doors.....				
905. Supervise health crusade movement.....				
906. Weigh children.....				
907. Measure children.....				
908. Care for ill pupil.....				
909. Give health talk.....				
910. Maintain first aid cabinet.....				
911. Correct posture.....				
912. Discover pupils who need glasses.....				
913. Inspect homes with respect to health.....				
914. Supervise physical examinations.....				
915. Organize nutrition class.....				
916. Inspect for defective teeth.....				
917. Issue weight cards to parents.....				
918. Instruct in sex hygiene.....				
919. Instruct in personal hygiene.....				
920. Make underweight survey.....				
921. Organize medical clinic.....				
922. Organize dental clinic.....				
923. Visit sick pupil.....				
924. Secure employment of school nurse.....				
<i>Cooperation with Health Officers</i>				
925. Report pupils needing care to nurse.....				
926. Send out nurse's report to parents.....				

SPECIAL SERVICES—CONTINUED

Indicate in the appropriate space the number of times each duty was performed

Day | Wk. | Mo. | Yr.

Duty—

927. Discuss health program with nurse.....
 928. Report reasons for absence to nurse.....
 929. Facilitate remedy of physical defects.....
 930. Report contagious disease.....
 931. Assist dental clinic.....
 932. Call doctor.....
 933. Help with health tests.....
 934. Report cases of illness.....
 935. File vaccination certificates.....
 936. Help give vaccinations.....
 937. Enforce vaccination regulations.....
 938. Inspect health certificates.....
 939. Supervise health inspection.....

Library

940. Organize room library.....
 941. Act as librarian.....
 942. Appoint librarian.....
 943. Supervise work of librarian.....
 944. Prepare set of library rules.....
 945. Organize outside library service.....
 946. Select new library books.....
 947. Search for missing library books.....
 948. Buy books for the library.....
 949. Train pupils in use of library.....
 950. Recommend books for public library.....
 951. Arrange for binding.....
 952. Check attendance in library room.....
 953. Prepare notices for overdue books.....

Guidance

954. Advise students concerning election of courses.....
 955. Organize course in vocational guidance.....
 956. Help pupil having special problem.....
 957. Help pupil with moral problem.....
 958. Advise pupils concerning leaving school.....
 959. Pass on request of indigent pupil.....
 960. Advise pupil concerning life work.....
 961. Advise student concerning higher educational training.....
 962. Visit pupil in difficulty.....
 963. Study pupil's vocational record.....
 964. Give vocational test.....
 965. Recommend pupil to vocational counselor.....
 966. Report case to welfare organization.....
 967. Report case to juvenile court.....
 968. Help graduates select colleges.....
 969. Help graduates plan college schedules.....
 970. Help graduates obtain positions.....
 971. Recommend students to college.....
 972. Serve as boys' adviser.....

SPECIAL SERVICES—CONTINUED

Indicate in the appropriate space the number of times each duty was performed	Day	Wk.	Mo.	Yr.
Duty—				
973. Serve as girls' adviser.....				
974. Visit prospective pupils.....				
975. Give instructions to new pupils.....				
976. Write letter of recommendation.....				
977. Help mother secure mother's pension.....				
<i>Transportation of Pupils</i>				
978. Study transportation problem.....				
979. Make preliminary trip over routes for timing purposes.....				
980. Reroute trucks.....				
981. Prepare time schedule.....				
982. Supervise seating of pupils in truck.....				
983. Meet buses in morning.....				
984. Dispatch buses in afternoon.....				
985. Do transportation clerical work.....				
986. Drive bus.....				
987. Order cars for special occasions.....				
988. Supervise repairs and replacements.....				
989. Arrange for supplementary transportation (e. g., street cars).....				
990. Draw up rules for drivers.....				
991. Draw up driver's contract.....				
992. Select drivers.....				
993. Oversee drivers.....				
994. Receive reports from drivers.....				
<i>Miscellaneous</i>				
995. Organize fire drill.....				
996. Supervise fire drill.....				
997. Organize fire-fighting brigade.....				
998. Remove animals from rooms and grounds.....				
999. Organize military drill.....				
1000. Direct military drill.....				

Administration and Supervision: State Department of Education

1. A statement of the duties of each member of the staff.
2. A statement of the activities of each member of the staff for the year ending July 1, 1927.
3. A statement of the aims, purposes, and objectives set up for each division. Through what agencies, activities, procedures, etc., are these aims, purposes, objectives realized?
4. A tabulation of visits made to each school division, with names of schools visited, purpose of visit, addresses given, etc.
5. Number of school or community visits made on invitation or call.
6. A statement of departmental expenditures during the past year, showing distribution of expenditures by division (high school supervision, Negro education, etc.). Include funds received from foundations and boards. Exclude funds distributed by department in ministerial capacity.
7. A classified list of appeals heard by the Superintendent of Public Instruction or the State Board of Education. List separately appeals from decisions of school trustee electoral boards.
8. A classified list of appeals coming to school trustee electoral boards, whether or not appealed from their decision to Superintendent of Public Instruction or State Board of Education.

Pupil Accounting and Compulsory Education

1. Total number of cases of nonattendance reported to your office by teachers since the act went into effect in 1922.....
2. Total number of cases prosecuted in court.....
3. Total number of convictions (carrying fines).....
4. Total number of cases involving conviction for a second offense.....
5. Number of truant officers employed; give salary of each.....
6. If no cases have ever been reported in your division, please state briefly the attitude of your local school board towards compulsory education.

County

Superintendent

What do the People of Virginia Desire and Expect from the Schools and Higher Institutions?

The schools of Virginia could serve the people better if they knew just what the people expect of the schools. We are sending this questionnaire to a select number of representative people in Virginia to secure this information. We trust that we shall have your cooperation in this matter. Frank and specific statements are requested.

1. What kind of training do you think the elementary schools should give boys and girls?
 - a. What benefits should pupils derive from an eight year course in our elementary schools?
 - b. What do you think are the chief merits and the chief defects of our elementary school work?
2. What kind of training do you think the high schools should give boys and girls?
 - a. What benefits should pupils derive from a high school course?
 - b. What are the chief merits and the chief defects of our high school work?
3. What do you think should be given chief place in
 - a. Elementary schools.
 - b. High schools.
4. Do you believe that tuition in high schools should be entirely free? Why?
5. What kind of training in general do you think the higher institutions in Virginia should give?
 - a. What benefits should our students derive from a course in a higher institution?

6. What kind of special training should each of the State institutions of higher learning give?
7. Do you think all of the State higher institutions should be open to men and women on the same terms?
8. Please make a statement in the space below concerning "What do you think the people of Virginia desire and expect from the schools and higher institutions of learning?" Be specific and concrete.
9. Do you think our people are generally satisfied with our schools and higher institutions? Please tell *why*, whatever your answer is.

My name is.....

My business or profession.....

I have had or now have children in (underline) elementary or high schools or college.

I was educated in Virginia (underline) elementary or high schools or college.

Home Economics: Questionnaire to Teachers

Name of school..... Location.....

Name of home economics teacher.....

No. of years you have taught home economics..... Total years taught.....

Kind of certificate held (check):

Special in home economics..... B. S. or A. B. degree.....

Two year normal diplomas..... M. A. degree.....

Salary

Home economics is taught by a home economics teacher in the following grades:
1....., 2....., 3....., 4....., 5....., 6....., 7....., 8....., 9....., 10....., 11....., 12..... (Check.)

Is home economics required..... If so, in what grades?.....

Is home economics elective?..... If so, in what grades?.....

If elective, what percentage elect it: In junior high school?.....
..... ; in senior high school?.....

Number of times class meets in grades 7, 8, 9, 10, 11, 12.

No. single periods..... ; No. double periods.....

Number of periods taught per week in home economics?.....

Other subjects?.....

What textbooks are used in these courses:

Foods, cooking and nutrition..... Grades.....

Clothing and textiles..... Grades.....

Personal hygiene and home nursing..... Grades.....

Child care Grades.....

Family relationships Grades.....

If a textbook is not used, are reference books adequate? In kind.....; in No.

How many units of credit offered in home economics?.....

How many students enrolled in home economics classes in

Elementary grades 1-6.....; senior high 9-12.....; senior high 10-12.....;
junior high 7-8.....; junior high 8-9.....;

Do boys have opportunity to take any home economics?.....

Elective? Required?

How is your department financed?

a. Fee paid by students.....

b. Fee paid by board.....

c. Supplies brought by pupils.....

d. Money raised by department.....

How many rooms used for home economics?..... State use of each room.....

Do you have a home economics club?.....

What are the activities of your club?.....

Community School

Rate your equipment according to the following score card:

	Perfect score	My score
1. Is the department adequately equipped? (Score 25)		
a. Has kitchen good stove, enough table space, sink, hot and cold water, towel racks, blackboard and necessary small equipment?.....	6	.....
b. Is there equipment for lessons in table service—dining table, chairs, table linen, china, silver, trays?.....	5	.....
c. Has clothing room good machines, tables, chairs, pressing facilities, mirror, storage space, blackboard and necessary small equipment?.....	6	.....
d. Is there equipment for laundry problems?.....	1	.....
e. Are there facilities for teaching home nursing?.....	2	.....
f. Are reference books available to the pupils?.....	5	.....
Total score for equipment.....	25	.....
2. Are the furnishings conveniently arranged? (Score 20)		
a. Are tables right height and well placed?.....	5	.....
b. Have classes worked out conveniences and improved arrangement of equipment?.....	2	.....
c. Is there provision for both individual and group work?.....	4	.....
d. Is arrangement such as to carry over into the home?.....	4	.....
e. Is there storage space for small equipment and cleaning tools?.....	2	.....
f. Is the lighting such as will prevent eye strain?.....	3	.....
Total score for convenience.....	20	.....
3. Is the department well cared for? (Score 15)		
a. Are high standards of housekeeping maintained—floors clean, furniture dusted, equipment clean, articles kept in proper places? Is good order maintained at all times?.....	15	.....
Total score for care of department.....	15	.....
4. Do you apply the principles of sanitation? (Score 15)		
a. Is the department screened? Are garbage and dishwater disposed of in sanitary ways? Are no unsanitary conditions present?.....	15	.....
Total score for sanitation.....	15	.....
5. Is the department used to the fullest extent? (Score 15)		
a. For class work?.....	.....	.....
b. Are school lunches served by the department?.....	.....	.....
c. Are community affairs held in the department?.....	.....	.....
Total score for use of department.....	15	.....
6. Is the department attractive? (Score 10)		
Is it homelike? Does one enjoy entering it? Are the color combinations pleasing? Is the furniture suitable for the community?.....	.....	.....
Total score for appearance.....	10	.....
Grand Total.....	100	.....

Home Economics Courses Taught

List the home economics subjects taught in these grades, giving the time it is taught, as

Grade	SUBJECT	Time in Years	SUBJECT	Time in Years
8	Foods and Clothing	$\frac{1}{2}$	Clothing	$\frac{1}{2}$

Grade	SUBJECT	Time in Years	SUBJECT	Time in Years
4				
5				
6				
7				
8				
9				
10				
11				
12				

What does foods include in addition to cooking?.....

What does clothing include in addition to sewing?.....

List below the phases of home economics included in your work but not taught as *separate* courses:.....

Miscellaneous

1. Is your community interested in home economics? (Check.)
Apparently not..... Moderately so..... Much interested.....
2. Do you meet opposition in the advancement of home economics?.....
3. Nature of opposition.....
4. How did home economics originate in your schools?.....
5. Do you attend and participate in educational meetings?.....
6. Are you a member of the Virginia Home Economics Association?.....
7. What means do you use
 - a. To keep your subject matter up to date?.....
 - b. To keep your methods of teaching up to date?.....
8. List the objectives most difficult to obtain:
 - a. Appreciations
 - b. Habits
 - c. Skill
 - d. Knowledge
9. What types of test questions do you give? (Check.)
Discussion..... True, false..... Completion..... Alternate choice..... Multiple choice.....
10. What use do you make of results gained from giving tests?.....
11. a. How many students enrolled in home economics classes?.....
b. How many of their homes have you visited?.....
c. How many do you plan to visit by Christmas?.....

12. Do you know your community?
 a. Its racial, religious, and social customs?
 b. Standards of living?
 c. Ambitions and interests?
 d. Industrial conditions and needs?

METHODS OF PRESENTING WORK (Check each subject)	Foods & Nutrition	Textiles & Clothing	Hygiene & Home Nurs.	Home Mgmt.	Child Care	Family Relations
1. Lecture						
2. Discussion						
3. Laboratory and Discussion						
4. Laboratory						
5. Cottage Plan						
a. Is the work organized on the single lesson basis, or on the problem basis where a group of lessons center on the solving of a problem?						
b. In planning your lesson do you make 1. A mental plan 2. A written lesson plan 3. An outline of Lesson 4. A lesson guide sheet						
c. Are lesson guides, or job analyses, made 1. By the Teacher 2. By the pupils and teacher						
d. Are lesson guides made for 1. A single day's lesson 2. A group of lessons forming a unit						
e. Does each day's lesson contribute to solving a problem? Is the pupil conscious of the problem?						
f. In planning your lesson check in each column of the following you have in mind 1. What pupils will do 2. What information they will learn 3. What skills will be strengthened 4. What attitude and ideals will be developed 5. What references will be used						

In Regard to Home Projects

Do not confuse home projects and home practices. Interpret home practice as a single piece of work having as its main objective skill; home project as a larger unit of work comprised of several smaller jobs or processes.

Do your students do home projects?.....

How many of your students are now planning or engaged in home projects?.....

Are they supervised?..... If so, how?.....

Name their projects in

Foods and cooking.....

Clothing and textiles.....

Home nursing

Home management

Care of house.....

Health (include Five-Point program).....

Other subjects

Information in Regard to Foods and Nutrition

1. Check on right margin the abilities which you strive to have pupils acquire:
 - a. To learn to cook foods used in their homes.....
 - b. To plan simple home meals which meet the needs of individual members of their families.....
 - (1) Sufficient food for day's activities (energy).....
 - (2) Sufficient food for growth and repair:
 - Protein adequate in kind.....
 - Protein adequate in amount.....
 - (3) Daily use of such foods as will provide sufficient
 - Calcium..... Phosphorous.....
 - Iron..... Iodine.....
 - (4) A daily use of such foods as will provide vitamins:
 - A..... B..... C..... D.....
- c. To set the table and serve well simple home meals with or without maid service, depending upon the situation at home.....
- d. To buy food for the family.....
- e. To spend the money allowed for food wisely.....
2. Do you require home practice in any of the above abilities, or is all work done in class periods?.....
- Are home practices of such nature as to help parents with the work?.....
3. If work is done at home, how is it checked up?
 - By parents' reports..... By pupils' reports..... By home visits.....
4. Do you have difficulty in getting this home practice work done?.....
- What is the cause of the difficulty? Student's lack of interest.....
- Parents' lack of cooperation..... Other predominating interests.....
5. About what percentage of your pupils do satisfactory home practice on food work?

Information in Regard to Health

- List the health habits which you are trying to have your pupils establish:.....
- What check do you make on the forming of these habits?.....
- Do pupils or teacher keep a record which shows progress?.....
- If so, what records?.....

Information in Regard to Home Nursing

1. Check below the abilities which you strive to have pupils acquire:
 - a. To take proper care of the sick room.....
 - b. To make a patient comfortable in bed.....
 - c. To render such service as does not require a trained nurse.....
 - d. To take temperature, respiration, pulse.....
 - e. To realize the importance of cheerful atmosphere and power of suggestion.....
 - f. To prepare invalid trays.....
 - g. To follow doctor's directions in preparing special diets.....
 - h. To carry out preventive measures against communicable diseases.....
2. In which of the above abilities do you require home practices?.....
3. If home practices are required, how are they checked up?
 - By reports from parents..... By reports from pupils.....
4. Do you have difficulty in getting the home practice done?.....
5. About what per cent of your pupils do satisfactory work in home nursing?

Information in Regard to Child Care

1. Check on right margin the abilities which you strive to have pupils acquire:
 - a. To be able to take care of younger children.....
 - b. To be able to select and care for clothing of younger children in family

- c. To plan and prepare meals for small children in family.....
- d. To cooperate and help to train children to form good habits of eating, sleeping, behavior
- e. To provide fresh air, exercise, rest periods, and play for small children
- 2. Do you succeed in securing home practices in any of the above abilities?.....
- 3. If work is done at home, how is it checked up?
By parents' reports..... By pupils' reports..... By home visits.....
- 4. Do you have difficulty in getting this home practice work done?.....
- What is the cause of the difficulty: Students' lack of interest..... Parents' lack of cooperation..... Other predominating interests.....
- 5. About what per cent of your pupils take home responsibilities with children

Information in Regard to Home Management

- 1. Check on the right the abilities which you strive to have your pupils acquire:
 - a. To help plan the family budget.....
 - b. To plan her personal budget.....
 - c. To plan a simple system of keeping household expenses.....
 - d. To make deposits at bank.....
 - e. To draw checks on bank.....
 - f. To prevent and exterminate flies and other household pests.....
 - g. To work out a plan providing for her home duties and school activities and leisure time.....
 - h. To help plan the routine activities involved in housekeeping.....
 - i. To work on "arrangement for convenience" equipment in home.....
- 2. Do you succeed in securing home practices in any of the above abilities?.....
- 3. If work is done at home, how is it checked up?
By pupils' reports..... By parents' reports..... By home visits.....

Information in Regard to Family Relationships

- 1. Check on right the *appreciations* which you strive to have your pupils acquire:
 - a. Assume her share of responsibilities in regard to
 - Work in the home.....
 - Recreation in the home.....
 - Cooperation with members of family.....
 - Cooperation in regard to family budget.....
 - Developing a sympathetic understanding.....
 - b. Good manners
 - c. Community pride and cooperation.....

Information in Regard to the Care of the House

- 1. Check on right margin the abilities which you strive to have your pupils acquire:
 - a. To give necessary daily care, using only such equipment as is approved from sanitation standpoint.....
 - b. To do such house cleaning tasks as are necessary less often than once a week in a way to save energy and time and yet protect furniture and equipment
 - c. To use effectively and take proper care of special cleaning equipment, vacuum cleaners, etc.....
 - d. To clean stove.....
 - e. To clean bathroom.....
 - f. To prevent and exterminate flies and other household pests.....
- 2. Are you able to secure home practices in the house cleaning abilities?.....
- 3. If these home practices are performed, how are they checked up?
By parents' reports By pupils' reports By visits to home.....
- 4. Do you have difficulty in getting pupils to help with house work at home?.....
- 5. About what per cent of your students do satisfactory home work?.....

Information in Regard to Clothing

1. Check on right margin the abilities which you strive to have pupils acquire:
 - a. To do the constructive processes necessary in making the under and outer clothing which they wear.....
 - b. To recognize standard textile fabrics and judge their qualities.....
 - c. To select appropriate designs and color for their clothing.....
 - d. To buy clothing so as to get greatest value and satisfaction for the money invested
 - e. To care for their clothing so as to get the greatest service out of it
 - f. To mend and renovate and remodel their clothing.....
2. Do you succeed in securing home practice in any of the above abilities, or is all work done in class periods?.....
3. If work is done at home, how is it checked up?
By parents' reports..... By pupils' reports..... By home visits.....
4. Do you have difficulty in getting the home practice done?
What is the cause of the difficulty? Student's lack of interest ; parents' lack of cooperation..... ; other predominating interests.....
5. Do you teach the processes of construction by having pupils learn on samples or by applying them directly to a problem?.....

Information in Regard to Art

1. Check on right margin the abilities which you strive to have pupils acquire:
 - a. In use of color.....
 - b. In form and line.....
 - c. In balance
2. Are these principles applied to
 - a. Home furnishings
 - b. Clothing

Home Economics: Questionnaire to Parents

- Name of school..... Location of school.....
- Is your school rural, city, or small town?.....
- Is home economics taught in the high school?.....
- Do you now have or have you had any girls taknig this work?.....
- Are the girls interested in the work?.....
- If so, do they show their interest in the following ways:
 - a. By doing better work at home.....
 - b. By wanting to try at home the things which they do and talk about at school
 - c. By showing a better appreciation of the work in the home.....
- Is the girl's interest in the work due partly to encouragement at home?.....
- If the girls are not interested in home economics, is it due to
 - a. Lack of encouragement at home.....
 - b. Lack of encouragement at school.....
 - c. Personality of the home economics teacher.....
 - d. Too much time required as compared to other subjects.....
 - e. Subject not interesting.....
 - f. Having taken the subject before reaching high school, feel they have had enough
 - g. Question of whether it will be accepted for college entrance credit.....
- Please make any suggestions you care to for improving the work.
- What phases of home making do you think the home economics work should include?
- What phases of home making do you think the home economics work should not include?

Home Economics: Questionnaire to City Superintendents, County Superintendents, High-School Principals

Name..... Position.....
Place..... Name of high school..... City..... Rural.....
How many high schools under your supervision?.....
How many of these high schools offer home economics?.....;
Elective..... Required.....
How many girls enrolled in high schools where home economics is taught?.....
How many of these girls elect home economics?.....
As compared with other electives, is home economics as popular?.....
More popular?..... Less popular?.....
Check the influences which you feel are responsible for the standing of home economics in your high school:
For Against
Personality of home economics teacher
Poor teaching of this subject
Attitude of:
Superintendent
Principal
Others in high school
Parents or community
Is the influence of those advising girls in regard to electives a factor?
Is the fact that some colleges give little or no entrance credit in home economics a factor?
In your opinion, should home economics be offered as an elective or requirement in:
High school..... Junior high school.....
Do you consider home economics a cultural subject?.....

Instructions for Filling in Form

1. Buildings now under construction and to be used during the session 1927-28 should be included in tabulation in columns 1, 2, 18, and 19.
2. Buildings which have been wholly abandoned since 1920 should be listed in columns 1, 2, and 20.
3. Buildings now in use, one or more rooms of which have been discarded, should be listed, and the information in columns 1 to 20, except columns 18 and 19, should be supplied.
4. Buildings now in use but to be abandoned during the session 1927-28 and replaced by buildings now under construction, should be listed and the information in columns 1 to 20, except columns 18 and 19, supplied. Please don't fail to indicate such buildings in margin.
5. In listed buildings in which there are rooms which have never been occupied please list such nonused rooms in column 20, and mark on margin opposite "never used."
6. In supplying this information from your schools will you please make certain to tabulate the information for white and colored schools separately.
7. If you have more schools in your county than can be listed on one sheet use a second or third, or more, if necessary.
8. Standard and nonstandard rooms should be interpreted as follows:

Standard Rooms:

- First: Rooms providing for a minimum of twelve-foot ceiling height (to be estimated in case of doubt).
- Second: Classrooms providing for a minimum of twenty per cent floor space in glass area (to be estimated in case of doubt) to the left or to the left and rear of the pupils.
- Third: Classrooms providing for a minimum system of ventilation, including window deflectors, vent ducts running from floor line to ceiling of wardrobe through roof.
- Fourth: Classrooms heated with a minimum of either an approved make of jacketed stove or a central heating plant.
- Fifth: A minimum of thirty lineal feet of blackboard space.
- Sixth: A minimum sized classroom accommodating twenty-five pupils, allowing fifteen square feet of floor space per pupil.

Nonstandard Rooms:

- First: Any classroom in which one or more of the above points are not fully provided.

Educational and Vocational Guidance

Educational and vocational guidance is rapidly becoming recognized as forming an important place in the school program. The belief is now generally held that, in addition to providing the so-called tools of knowledge, it is the duty of the State, through its public schools and other agencies, to assist children in the wise selection of their life work through occupational information, and through discovering the extent to which they possess the qualifications requisite for success in the occupation of their choice, broadening their opportunity for their vocational choice, and offering efficient preparational training for such occupation.

I am, therefore, requesting your views on this subject as indicated in your answers to the following questions:

1. Do you think that the programs of work for our public schools should make definite provision for vocational and educational guidance?
2. Check any of the following items you think should be contained in such program of guidance:
 - (a) Efficient use of school time—directed study.
 - (b) Health and physical activities.
 - (c) Discovery of special interests.
 - (d) Discovery of individual differences in traits and abilities.
 - (e) Guidance in the selection of subjects and courses.
 - (f) Guidance in social and civic activities.
 - (g) Guidance in making vocational choices.
 - (h) Guidance in acquiring vocational and occupational information.
 - (i) Providing exploratory experiences.
 - (j) Personal counseling.
 - (k) Assistance in placement.
 - (l) Check proper person to administer guidance program: 1. Superintendent. 2. County supervisor. 3. School principal. 4. Special director. 5. Grade teacher.
 - (m) Should the school budget contain provision for a guidance program?
 - (n) Is it practicable and advisable to secure and keep records of each pupil to aid in guidance?
 - (o) Is it practicable and advisable to use educational and mental tests as a help in guidance?
 - (p) Can provision be made for counseling pupils?
 - (q) Can the school make systematic provision for vocational information to be used as a basis for guidance?
 - (r) Have you one or more teachers who are naturally adapted to become counselors?
 - (s) Should a counselor have special training for the work of counseling?
 - (t) If you have any plan of guidance in your school, send me a copy.
 - (u) Add here any comments concerning educational and vocational guidance in your schools.

Physical Education

Scorecard for checking work in physical education in elementary and secondary schools in Virginia.

1. Name of school, county, or institution reporting.....
2. Is continuous record kept showing physical condition of each student?..... What use is made of this record?
3. Are physical efficiency tests given?..... How frequently?
..... By whom?..... What tests are given?
4. Do efficiency tests determine amount or kind of work student is permitted or required to take?
5. Are corrective gymnastics given students needing same?
Who gives them?..... How frequently are they given?
6. Remarks (value of) concerning corrective gymnastics.....
7. Is physical education required every day of all students while in school?
8. What proportion of total day's work is devoted to plays and games?
9. What proportion of total day's work is devoted to physical education? Men..... Women.....
10. What proportion of total day's work is devoted to gymnastics and calisthenics?
11. What per cent of buildings are equipped with gymnasiums?.....
12. What per cent of buildings are equipped with adequate playgrounds?.....
13. What per cent of pupils have training in gymnasiums every day?.....
14. What per cent of pupils play out of doors every day?
What plays?
15. What per cent of your schools have organized play every day?.....
16. What type or kind of physical education is emphasized in (a) primary grades; (b) intermediate grades; (c) grammar grades; (d) high school?
17. What per cent of your teachers have had training for physical education?
18. What per cent of your schools are equipped with a physical director?
19. What is emphasized in your physical education—gymnastics, calisthenics, or plays?
20. What per cent of your pupils have access to school physicians..... ; nurses..... ; dentists..... ; mouth hygieists.....
21. What per cent of your high schools have military training?.....
22. What per cent of boys over fourteen years of age participate in military training?.....
23. Average number of minutes per week given to physical education in grades 1..... 2..... 3..... 4..... 5..... 6..... 7..... 8..... 9..... 10..... 11?
24. Name of person reporting.
Title (if any).....
Address

Music in the Schools of Virginia**I. Status of music instruction in high and elementary schools.**(To be answered by the division superintendent or the director of music.)
County or city.....

Division superintendent

1. No. of directors or supervisors of music employed.....

2. No. of full time teachers of music employed.....

3. No. of part time teachers of music employed.....

4. Is music a required subject in (a) elementary grades?
(b) high school?.....

5. Total number of pupils enrolled studying music.....

6. Approximately how much time per day during school hours is devoted
to the study of music?.....7. Underscore the following subjects taught: Chorus singing, band, or-
chestra, sight singing, voice culture, piano, violin, appreciation, music
history, theory, harmony, form.

8. Are music memory contests held?.....

9. Is credit granted for outside music courses?
If credit is granted, is an examination required before the credit is
given?

Remarks

II. Individual music teacher's questionnaire.(To be answered by each teacher of music employed by the school board.)
County or city

Name

Date and place of birth.....

Academic training

1. Music schools and teachers with whom you have studied, giving
length of time with each.....

2. Music subjects you have studied.....

3. Do you teach public school of applied music?.....

4. What music certificates, diplomas, or credentials do you hold?.....

5. How long have you taught music?..... What
grades? What subjects?..... Special courses, if any.....6. How much time do you require of your music pupils for music study
and practice?.....

Remarks

Virginia Congress of Parents and Teachers

Name of organization.....

Town or school..... County..... Date.....

Is your organization affiliated with the State Parent-Teachers' Association? _____

1. To which of the following types of work does your parent-teacher association devote its primary attention?
 - (a) The precircle, or mother circle work.....
 - (b) The kindergarten work.....
 - (c) The elementary school.....
 - (d) The intermediate and grammar school grades.....
 - (e) Problems connected with the high school age.....
 - (f) Of general community education.....
2. When was your parent-teacher association organized?.....
3. What is your total membership this year?
 - (a) How many teachers are employed in your schools?.....
 - (b) How many teachers are members of parent-teacher association.....
 - (c) How many members who are neither parents nor teachers?.....
4. How frequently do you hold regular meetings?.....
5. On what day of the week and month are such meetings held?.....
6. At what time of the day do you meet?..... At what place?.....
7. How many subscribers have you for Child Welfare Magazine?.....
8. Have you a constitution for your organization?
(Please enclose a copy if possible.)
9. How frequently do you elect officers?.....
In what month of the year?.....
10. Name three who have the greatest interest and vision of P.-T. A. work in your association.
11. For which of the following functions do you have standing committees?
 - (a) Publicity..... (f) Motion pictures.....
 - (b) Membership (g) Religious.....
 - (c) Programs..... (h) Extension.....
 - (d) Social..... (i) Cooperation with other agencies.....
 - (e) School beautifying..... (j) List others you may have.....
12. Who took the initial step in organizing your parent-teacher association?.....
13. Check the following incentives that were the chief motive for organizing:
 - (a) The need of a better school plant.....
 - (b) A better paid and more efficient teaching corps.....
 - (c) Pressure of moral conditions in the community.....
 - (d) The need of proper amusements in the community.....
 - (e) The need of regulating the health of school children.....
 - (f) The need of promoting regularity of school attendance.....
 - (g) A desire to get familiar with the course of study used in your school and the need for improving it.....
 - (h) Lack of adequate playground facilities.....
 - (i) A desire to get in more intimate touch with the faculty of the school and the board of education.....
 - (j) Encouragement brought to bear from other communities which had a parent-teacher association
 - (k) List others not mentioned.....
14. Give work which your parent-teacher association has undertaken to accomplish:
 - (a) Introducing hot lunches into the school.....
 - (b) Providing clothes, books, food, and clothing for children improperly taken care of at home.....
 - (c) Establishing a kindergarten department in school.....
 - (d) Introducing agriculture into the school.....

- (e) Introducing home economics into the school.....
 - (f) Introducing manual training into the school.....
 - (g) Introducing new textbooks into the school.....
 - (h) Introducing a new course of study into the school.....
 - (i) Getting a school nurse.....
 - (j) Getting a playground director.....
 - (k) Getting free medical and dental attention for the children in school.....
 - (l) Placing a piano in the school.....
 - (m) Placing a motion picture machine in the school.....
 - (n) Providing needed school equipment (apparatus, etc.). What.....
 - (o) Providing adequate playground facilities.....
 - (p) Providing proper kinds of recreation for children in the community.....
 - (q) Beautifying the interior of the school building.....
 - (r) Beautifying the school grounds.....
 - (s) Establishing a community library and rest room.....
 - (t) Reducing truancy in school.....
 - (u) Encouraging high school graduates to attend college and normal school.....
 - (w) Holding baby contests in the community.....
 - (x) Attempting to get desirable kinds of pictures into the theatres of the community.....
 - (y) Providing a community house for social and recreational purposes.....
 - (z) Have you given the P.-T. A. pageant? If not, write to Walter Ben Ward, Springfield, Mo., about its advantages for entertainment.....
- Does your secretary or publicity chairman keep a scrap book of all P.-T. A. clippings and activities?.....
- How much money have you raised during the past year, including all equipment, delegates to convention, clinics, etc.?.....
- Maintaining a community lyceum.....
- (a) Maintaining a community chautauqua.....
 - (b) Raising the standard of instruction in your school.....
 - (c) Raising the salaries of teachers in your community.....
 - (d) Raising the standards of parenthood in the community.....
 - (e) Other objectives not listed.....

Note: Please enclose a copy of your program for the year, if possible.

15. Check the following methods of procedure most commonly used in your meetings:
- (a) Music by pupils of the school.....
 - (b) Readings by teachers or other members.....
 - (c) Reading of minutes of previous meetings.....
 - (d) Community singing..... (e) Talks by teachers.....
 - (f) Open discussion taken part in by all members present.....
 - (g) Debates between several members on questions previously announced.....
 - (h) Open forum debates on public questions.....
 - (i) Reading of papers by members.....
 - (j) Talks by speakers from out of town.....
 - (k) Do you use loan papers provided by national officers?.....
 - (l) Other methods not stated.....
 - (m) Do you use articles in Ladies' Home Journal and other periodicals referring to P.-T. A. work?.....

Note: Please enclose a sample program, if possible.

16. Check the following courses for which study classes are organized in your community through the parent-teacher association:

	No. of Men Enrolled	No. of Women
(a) Child labor
(b) Citizenship
(c) Sex hygiene
(d) Public health
(e) Classes in care and training of children.....	Enrollment.....
(f) Classes in infant hygiene	Enrollment.....
(g) Classes in child nurture.....	Enrollment.....
(h) Classes in parenthood training.....	Enrollment.....
(i) Institute in parent-teacher association work.....	

17. Which of the following methods do you employ successfully to increase the membership of your organization? Check X.

(a) Offering prizes to children in rooms having the most present at meetings	
(b) Holding meetings to which everybody is invited.....	
(c) Offering prizes to children in rooms having the most new members to their credit at a specified time.....	
(d) Personal canvass made of nonmembers present at any meeting.....	
(e) Writing letters of invitation to parents not attending.....	
(f) Membership committees calling on parents not attending.....	
(g) Special campaigns held for new members.....	
(h) Mention other methods not listed.....	

18. Check the following methods which you are using successfully in financing your parent-teacher association: (X)

(a) Membership dues.....	What amount.....
(b) Through public programs, charging admission.....	
(c) Through socials	
(d) Name other methods that are not listed here.....	

19. Check the following factors which are most influential in preventing the success of your parent-teacher association: (X)

(a) Opposition or indifference on the part of your county superintendent of schools	
(b) Opposition or indifference on the part of your local superintendent, principal or teachers.....	
(c) Opposition on the part of the board of education.....	
(d) Indifference and a lack of interest on the part of parents.....	
(e) Lack of proper leadership in the community.....	
(f) Opposition on the part of local editor.....	Lack of publicity.....
(g) Church rivalry in the community.....	
(h) Political factions in the community.....	
(i) Name others not listed.....	

20. Give full list of present officers and committee chairmen:

President.....	Treasurer.....
Vice-President.....	Committees.....
Secretary.....	

REPORT

OF THE

Commission to Survey the Educational System of Virginia

SUBMITTED TO THE

GENERAL ASSEMBLY JANUARY, 1928



House Document No. 4

RICHMOND

DAVIS BOTTOM, SUPERINTENDENT PUBLIC PRINTING

1928

LETTER OF TRANSMITTAL

RICHMOND, VA., December 15, 1927.

To the Members-Elect of the General Assembly of Virginia:

The Commission to Survey the Educational System of Virginia, appointed in pursuance of an act of the special session of the General Assembly of 1927, submits its report in three parts:

PART I—Elementary and Secondary Education.

PART II—Higher Education.

PART III—Public Education in Virginia.

Parts I and II constitute the report of the commission; Part III contains the report of the experienced educators, not residents of Virginia, who have made an extensive and intensive survey of all departments of the educational system. This part will be printed in a separate volume.

The statements and recommendations contained in Parts I and II, constituting the report of the commission, are based upon Part III, the report of the survey staff, and upon observations and studies made by members of the commission. In its reports the commission has endeavored to present in brief and concise form its conclusions and recommendations as to public education in Virginia which, the commission believes, will provide an economical and modern unified system best suited to the needs of Virginia. The commission has not attempted to present details of administration by which changes of courses and methods of teaching must be put into effect, as these details, together with tabular data and statements in support of the conclusions reached by the commission and survey staff, are fully set forth in the staff report. Nor has the commission included in its report all of the recommendations made by the survey staff. The wisdom of most of the recommendations not included, as well as of those included herein, will be apparent to every one who reads the staff report, and that many of them will be put in practice is the hope and belief of the commission.

The commission desires here to acknowledge the cooperation and assistance rendered by every educator in the State. The commission also desires especially to acknowledge the cooperation received from the office of the Superintendent of Public Instruction.

The State of Virginia is indebted to Dr. M. V. O'Shea, the director of the survey staff, and his associates, for their deep and sincere interest in Virginia's educational problems and for the comprehensive and thorough survey they have made.

Respectfully,

ROBERT T. BARTON, JR., *Chairman.*
ASHTON DOVELL, *Secretary.*
JAMES S. BARRON,
W. W. BIRD,
W. H. EAST,
W. MONCURE GRAVATT,
META GLASS,
T. N. HAAS,
J. C. HASSINGER,
R. L. GORDON,
CHARLES J. SMITH.

PART I

Elementary and Secondary Education

THE PUBLIC FREE SCHOOL SYSTEM: ITS RECEIPTS AND EXPENDITURES

The magnitude of the Virginia educational system and of her educational problems is apparent from a brief statement of the organization of the public schools and the annual expenditures made in their support.

The State Department of Education, the State Board of Education, the Superintendent of Public Instruction and his assistants and administrative staff, have general supervision of rural, elementary and secondary education in Virginia. The Board of Education has divided the State into one hundred and twenty-two (122) school divisions, each embracing a city or one or more counties. In each division there is a superintendent who is now appointed by the State Board and whose salary is paid in part by this board from a State appropriation.

The supervision of the schools in each county and city is vested in a school board composed of trustees elected by the school trustee electoral board in the counties and by the councils in the cities. These school boards are responsible for school funds, determine teachers' salaries, and erect all buildings, the cost of which is borne by the counties, districts or cities in which they are situated. Teachers' salaries and general operating expenses are paid by local levies and State appropriations. The board of supervisors of the counties and the councils of the cities fix the amount of local levies for school purposes after consultation with the school boards.

Appropriations to elementary and secondary education for the year ending June 30, 1927, were as follows:

Appropriated by the State	\$5,337,084 00
Appropriated by the cities.....	6,360,358 00
Appropriated by the counties and districts	7,644,815 00
 Total appropriations	 \$19,342,257 00

In addition to these State and local appropriations, the school system received income from other sources:

Interest on the Literary Fund.....	\$ 194,169 00
Tuition fees, chiefly from high school students	458,084 00
Income from local trust funds and donations	337,412 00
Proceeds from sale of assets, etc.....	244,711 00
Federal aid	251,833 00
 Total	 \$ 1,486,209 00
Borrowings chiefly used in erecting and improving schoolhouses	2,781,347 00
 Receipts from all sources for public schools.....	 \$23,609,813 00

In 1915 the receipts from all sources for the public school system, as reported by the State Board of Education, were \$7,776,775.00, from which it will be seen that the total receipts have more than tripled in twelve (12) years.

The school enrollment in 1915 was 474,210, and in 1927, 559,317; the school attendance in 1915 was 317,140, and in 1927, 429,161.

The number of teachers in 1915 was 12,507 as compared with 17,051 in 1927.

Of the total State contribution to the schools for 1926-1927, \$5,415,361.97 was apportioned to the counties and cities for distribution by the local school officials, and \$164,135.00 was apportioned to the Board of Education for the payment of the salaries of the division superintendents and for administration expenses.

The distribution to the counties and cities was as follows:

<i>Item</i>	<i>Purpose</i>	<i>Amount</i>
General appropriation (distributed on the basis of school population).....	Salaries of teachers.....	\$4,536,572 30
High school fund.....	Salaries of teachers.....	193,423 91
Vocational education	Salaries of teachers.....	199,448 04
Vocational equipment	Equipment	36,373 41
Rural elementary schools.....	Salaries of teachers.....	361,200 00
Rural supervision	Salaries of supervisors	50,000 00
Rural vocations schools.....	Salaries of teachers.....	17,000 00
Physical education	Salaries of directors ...	21,344 31
 Total State appropriation		 \$5,415,361 97

IS THERE WASTE AND EXTRAVAGANCE IN THE USE OF SCHOOL FUNDS?

The State Department of Education

The State Department of Education has little or no control over the great bulk of school expenditures and much of the criticism it has received is unfounded and unjust. The department is, on the whole, economically and efficiently operated. Elsewhere in this report the commission makes certain recommendations as to the scope and emphasis of the department's activities.

County and City School Funds

The first inquiry of the commission and the survey staff was directed to the effectiveness of the State's educational expenditures in the counties and cities. The commission desired to know to what extent the taxpayer is receiving value for the money expended upon free education. Such an inquiry involved an examination and analysis of the county and city school expenses, which neither the commission nor the survey staff has been able to make because of the varying and thoroughly inadequate forms of financing and accounting existing among the boards of supervisors and the school boards of the counties and to a much less extent among those charged with handling school funds in the cities. The reports of the division superintendents were most unsatisfactory, the result of the unsatisfactory condition of the local records and the form of the reports.

The present school accounting practices have sufficed in the past when school expenditures were small and every expenditure was closely scrutinized, but such accounting practices are not adapted to modern needs and vastly increased receipts.

The existence of such an incomplete and unsatisfactory system of accounting in a governmental organization expending \$24,000,000.00 annually is in itself ample ground for complaint and criticism. Waste and extravagance are the inevitable result of loose accounting methods. The commission is satisfied that there is abundant room for sounder business management in the schools; many economies can be put into immediate effect, and sound business principles and policies must be inaugurated. Until these things are done it is impossible to discover to what extent the taxpayer is receiving value for the money expended on education.

The commission recommends that the Department of Education, in conjunction with the State Comptroller, establish and require an uniform, modern system of accounting for all school funds, local and State, and that monthly statements be rendered by the custodians of these funds to the school boards and the Board of Education. The new system

of accounting should be such as to present at all times an accurate statement and analysis of school finances.

Large County and City School Indebtedness

The indebtedness of the school divisions aggregates \$11,000,000.00. This indebtedness is carried in sundry ways: a part by loans from the Literary Fund, a part by county and district bonds of varying interest rates, and a part by local banks. The interest and principal payments are not promptly met by many localities. The commission believes that wise financial counsel can be of assistance in lowering the interest burden and curtailing the indebtedness.

The commission recommends that the State Board of Education, in conjunction with the State Treasurer and Comptroller, study the problem of county and city school indebtedness and recommend to the Governor a plan for placing such indebtedness on a better basis.

No Expenditures in Excess of the Budget

The law now forbids the expenditure of school funds in excess of the annual budget without the approval of the Board of Supervisors, but the commission is informed that a number of school boards have violated this provision.

The committee recommends that stringent measures be enacted to stop this unsound practice.

RURAL SCHOOLS MUST BE STRENGTHENED

The school system is weakest in the rural sections. As Virginia is predominately a rural State, rural education is of the first importance, and the first duty of the State should be to improve the school facilities, equipment and teacher personnel in the rural districts, at the same time adapting education to the situations and problems with which the rural population must deal in their every day life. It is believed that many of the complaints made as to the conditions in the rural school are well founded. The old and experienced teacher is dying out and his place is being taken by younger and less competent teachers who often teach only a brief time. The first step in rural educational progress is the improvement of the quality of the teacher.

CITY SCHOOLS SUPERIOR TO RURAL SCHOOLS

The city schools are generally much superior to the rural schools. Their receipts are larger, their buildings better and their teacher personnel higher than in the rural districts. But there is much to be done in improving the character of courses and methods of teaching.

SUBJECTS AND METHODS OF TEACHING NOT ADAPTED TO PRESENT NEEDS

The subjects and methods of teaching in all schools, but especially in the rural schools, are not adapted to modern needs. The classical and cultural emphasis placed upon the curricula requirements in the common school system heretofore and continued to a great extent today, has served a splendid purpose in giving the people of Virginia a cultural background not enjoyed by the citizens of some of her sister States. This emphasis has been successful in training Virginians for the so-called learned professions and for political leadership of unusual distinction, but at the same time it has failed to be sufficiently elastic to prepare for that leadership in the field of industrial and material development which today calls for the best of Virginia's energies. A cultural background should not be neglected, but it should not be so emphasized that the school children *are educated away from and not towards their probable vocations.*

As only a small proportion of students enter college, the curricula in all schools should not be directed alone to the preparation for entrance into college, but to an increasing extent pupils should be prepared, both by the courses offered and the methods of teaching, for entrance into agriculture, industry, trades and vocations, including home making. In the high schools, courses in applied sciences, adjusted to local conditions as far as feasible, should be emphasized. In such schools of less than four teachers, no foreign languages should be offered unless a majority of the pupils demand it. Foreign languages are usually poorly taught and the student has small use for the little he learns. Mental discipline can be as effectively obtained in more practical subjects than foreign languages. The higher institutions should admit pupils without penalty who have not completed courses in the foreign languages in the high schools.

The work in many of the high schools is superficial in that the pupils are permitted to pursue too many courses in order to obtain a diploma or qualify for entrance into college in a shorter time and before any course has been thoroughly mastered.

The methods of teaching in all of the public schools should be such as will develop in pupils *initiative* and *resourcefulness* and an eagerness to meet and deal with the problems of every day life.

Changes in courses and methods of teaching are not subjects for legislative action but must be brought about by the school authorities in conjunction with the authorities in the teacher training institutions.

The commission recommends that the school authorities hasten their efforts to adapt the courses and methods of teaching in the schools to the needs of the pupils of today.

BETTER TEACHERS ARE NEEDED

The greatest waste in the school system is in the employment of incompetent teachers. Much of the salary paid an incompetent teacher is a waste of the taxpayer's money and much of the time spent under such a teacher represents an irreparable loss to the pupils. The undeveloped abilities of every child are a loss to the State. Young men and young women who leave Virginia to seek better educational opportunities elsewhere and never return are a further loss to the State. Virginia today needs to develop to the fullest extent the abilities and energies of her school population and to retain these young people for the development of her material resources.

There is a surplus of teachers holding the present high school certificates, but there is not a surplus of competent high school teachers or of competent rural and elementary teachers. "As is the teacher, so is the school," is an adage as applicable today as in the past. The commission approves the action of the State Board of Education in gradually increasing the certification requirements of all teachers, but before the rural and elementary schools, which are in the greatest need of competent teachers, can benefit by the increased certification requirements, it is necessary that rural and elementary teaching be made more attractive, and that there be trained an adequate number of rural and elementary teachers holding higher grade certificates.

An arbitrary increase in all salaries without an increase in teacher qualifications cannot be justified in Virginia rural and elementary schools at the present time. The salaries of such teachers should not be increased except to secure competent teachers in the place of the incompetent ones or to enable incompetent teachers to become competent and competent teachers to become more competent.

The survey shows that the most competent graduates of the teachers colleges take positions outside of Virginia, largely on account of greater salary inducements. The survey also shows that better salaries and advantages attract a better class of teachers to the urban schools. While it is true that the rural schools will always suffer in competition with the urban schools, much can be done to attract more competent teachers to the rural sections.

The Commission recommends that a portion of the increased appropriation to be received from the State in the biennium 1928-1930 be applied by the local school authorities to paying better teachers better salaries.

PUPILS NEED GUIDANCE IN THE SELECTION OF COURSES

Because of the varying native talents and abilities of all children, pupils in the elementary and high schools should be advised to take the courses they are best qualified to pursue. All children cannot be put through the same educational hopper, but the amount and character of education given to each child must be carefully studied. Every child should be given an abundant opportunity to acquire a maximum of education, but no pupil should be subjected to the embarrassment and ignominy of striving unsuccessfully for an education not suited to his talents. No pupil should be allowed to remain in high school after he has ceased to derive advantages from high school studies and no student should be permitted to enter a college who is not fitted by mental qualifications and adequate preparation to pursue successfully the courses in the higher institution of learning.

The policy of classifying and grading pupils according to their ability to accomplish work should be continued and enlarged in order that backward pupils will not retard the progress of their brighter companions.

The Commission recommends that the school authorities take such steps as may be necessary to hasten adequate pupil guidance and grading in all schools.

CHANGES IN TEXTBOOKS

Changes in textbooks are expensive and must be kept to the minimum, but it is more expensive both to pupils and State to teach from obsolete books such as geographies with maps drafted before the World War, or to teach an obsolete system of penmanship.

The Commission recommends that beginning immediately, and continuing until the next textbook adoption in 1930, the Board of Education, in conjunction with representative groups of teachers in all schools, study the textbook situation in order that the books next adopted may be suited to the needs of the school children of a progressive State.

BETTER SUPERVISION NECESSARY.

Competent and intelligent supervision is needed in all schools and more so in the rural and elementary schools where teachers are less experienced and more scattered than in the city schools. By supervision is not meant mere inspection but real guidance and assistance.

The Commission recommends that the number of competent supervisors be increased as funds permit; that no

one be appointed a supervisor or a school principal who is not thoroughly qualified for the position by training and experience.

COMPULSORY SCHOOL LAWS SHOULD BE STRENGTHENED

The last school census shows that 14,000 Virginia children of school age are illiterate. An illiterate child is a handicap to himself, to his neighbor and to the State. Virginia must continue the process to a greater and more effective extent of eradicating illiteracy by strengthening her compulsory school laws and seeing that they are enforced so that all the children of the State will receive at least an elementary education.

The Commission recommends that the compulsory attendance laws be amended:

- a. So as to provide for the compulsory attendance of children who have reached the seventh birthday and have not passed the fifteenth birthday (the present ages are eight and fourteen);
- b. So as to establish a minimum school term of one hundred and sixty days;
- c. So as to provide for compulsory attendance throughout the school term;
- d. So as to abolish exemption on the basis of the ability to read and write;
- e. So as to provide that exemption for physical or mental disability shall be granted by the county or city board.

THE STATE BOARD OF EDUCATION

No member of the State Board of Education should be professionally connected with the educational system of the State.

The commission, therefore, approves the pending amendment to the Constitution providing for the appointment of the State Board of Education by the Governor subject to confirmation by the General Assembly.

SUPERINTENDENT OF PUBLIC INSTRUCTION

The commission approves the pending amendment to the Constitution providing for the appointment of the Superintendent of Public Instruction by the Governor subject to confirmation by the General Assembly and providing further that the General Assembly shall have power after January 1, 1932, to provide for the election or appointment of the Superintendent of Public Instruction as it may prescribe.

ADMINISTRATION AND SUPERVISION SHOULD BE DECENTRALIZED

The administration of education in Virginia is highly centralized because of the present provisions of the Constitution and laws of the State relating to the appointment of school superintendents and school boards. School authority should be decentralized so that the different communities in Virginia may take the initiative to a considerable extent in discussing and determining educational objectives, materials, and methods of instruction.

Division Superintendents Should Be Appointed by School Boards

Division school superintendents are now elected by the State Board of Education. The local school boards should be empowered to select the superintendents who will administer school affairs under their direction.

The commission approves the pending amendment to the Constitution transferring the power to appoint division superintendents from the State Board of Education to the county and city school boards.

County School Boards Should Be Elected by the People

At the present time the school trustee electoral board, appointed by the circuit judge, appoints one trustee from each magisterial district to the county school board. It also hears appeals from the action of the county board which it appoints. This system of school organization gives the people but little voice in the fundamental matters of education. There is every reason why the power to select school boards in the counties should now be lodged with the people as is now lodged the power to select the boards of supervisors.

The commission recommends that the school trustee electoral board be abolished and hereafter the school trustees be elected by the people; that appeals by aggrieved citizens from the action of the county school board go directly to the State Board of Education, which shall establish the necessary procedure for hearing such appeals in the locality from which they arise.

State Department of Education

The State Department of Education is well organized and efficiently conducted from an administrative standpoint, but, in the opinion of the commission, it is still placing too much emphasis upon supervision and inspection. Its supervising staff is too small to make more than the most cursory inspections of the many school units in the State even if such inspections are desirable.

The commission recommends that the State Department of Education stimulate and encourage local supervisory ac-

tivities, local curricula revisions, research and experimental work, the improvement of instruction in local supervisory units, and center its attention upon elevating the importance of the local school boards and school officials.

WISE CONSOLIDATION OF SCHOOLS SHOULD BE CONTINUED

The commission approves in principle the consolidation of smaller schools if made after a thorough investigation both as to the actual need for consolidation and the location of the consolidated school.

The commission recommends more and more wise consolidation as good roads increase.

NEGRO EDUCATION SHOULD BE IMPROVED

Virginia's negro population is an important factor in the State's economic problem. An illiterate negro population retards the development of the State and is a menace to the prosperity of the white as well as the negro race.

The commission recommends that the facilities for the education of the negroes be increased and the negroes required to utilize these facilities; that negro education be adapted to the chief needs of the negro in the social and industrial areas in which he will live and labor.

ADDITIONAL SCHOOL APPROPRIATIONS

The commission does not believe it advisable or practicable to recommend any increase in the State school appropriation for the biennium 1928-1930 over the increase of \$1,250,000.00 announced by the Governor. The budget has been prepared and printed. A tax program based upon the budget has been announced and any increase in appropriations will disturb this program.

The commission expresses the hope that in the future the State income will permit increased appropriations to be used in many of the ways wisely recommended in the staff report.

POOR COUNTIES NEED STATE ASSISTANCE

The commission believes that it is incumbent upon the State to assist financially the poor counties in order that their school population may have opportunities approaching the opportunities in the more prosperous counties. Unless the States does this, the poor sections will become poorer and a greater burden on the rich sections. The State should create a fund to assist those school divisions which cannot further help themselves. This fund should not be paid out as

a bonus for educational advancement, but should be distributed among the school divisions according to their actual needs. The fund should be used to close school-gaps somewhat after the manner in which the road-gap fund is now utilized.

The commission recommends that a sum not exceeding \$200,000.00 of the increase in the next biennial appropriation to free schools be apportioned by the State Board of Education to the payment of salaries of teachers in rural districts where there is the greatest actual need.

THE POOR MAGISTERIAL DISTRICT SHOULD BE ASSISTED BY THE COUNTY

Just as it is the duty of the State to assist the weaker divisions so it is the duty of the counties to assist the weaker magisterial districts in order to equalize educational opportunity within their own borders.

The commission recommends that the district levy for school maintenance be discontinued in favor of a county levy, but the district levy be retained to meet existing district indebtedness and future capital outlay.

FREE HIGH SCHOOLS

Tuition is charged in a great number of the high schools of the State. The commission believes that high school education should be free to all children who apply and who have given evidence of sufficient aptitude to pursue it.

The commission recommends that the State Department of Education study the problem of free high school education and propose measures which will offer equal opportunity in every community to all children qualified for high school work.

LITERARY FUND

The Literary Fund established by section 133 of the Constitution has served a splendid purpose. For years before education supported by public taxation became an accepted policy of the State, the Literary Fund was public education's almost sole source of revenue. The principal of the fund now amounts to approximately \$6,000,000. Its annual income is approximately \$200,000.00 and constitutes less than one per cent of the total receipts of the schools. Three million dollars of the principal is used as a revolving loan fund to the school divisions for the construction of schoolhouses. Two million dollars has been or will be loaned to the higher institutions for the construction of dormitories. The commission believes that the present principal of the fund is adequate for all the purposes for which it is used and that the annual

increments can be directed to better advantage into current educational receipts. If the annual increment of \$200,000.00 is so directed, the annual school receipts will be increased in that amount instead of in the sum of \$8,000.00, which will be the maximum interest on the annual increment if it is added to the principal of the fund.

The commission recommends that section 143 of the Constitution be amended so that the existing principal of the Literary Fund will be preserved and the interest thereon utilized as at present, but future increments will be directed into current public free school receipts.

LIBRARY FACILITIES SHOULD BE EXTENDED

A library is a means of continuing education for all the people. Its value is everywhere well recognized. A public library is especially valuable in the rural districts where books are fewer and the means of communication more difficult than in the urban sections.

The commission recommends that beginning with the biennium 1928-1930 the sum of \$50,000.00 be apportioned from the educational appropriation to be expended under the direction of the Board of Education for the purchase of books for libraries in the rural districts if and when such libraries are established and their maintenance assured by the several counties.

The State Library is by character and by law a part of the educational system. The Board of Education appoints the library board. The library extension department and the school library division seek to perform nearly corresponding services to the people of the State. One or the other should perform these services, not both. It is thought the Department of Education is best equipped to do this work, as the libraries will usually be lodged in the schoolhouses under the care and supervision of the school authorities.

The commission recommends that the library extension department of the State Library and the library department of the State Board of Education be merged and lodged in the State Department of Education.

TEACHERS' RETIREMENT FUND LAW

According to a recent report by competent authorities the present teachers' retirement fund law is fundamentally unsound. Neither the survey staff nor the commission has been able to devise a practical law because of lack of information and time.

The commission recommends that the State Board of Education, after conferring with the Virginia Education

Association, draft a sound and practicable law, and make report to the 1930 session of the General Assembly.

AUXILIARY EDUCATIONAL AGENCIES

It has come to the knowledge of the commission that in some localities the Cooperative Education Association and the Congress of Parents and Teachers have engaged in rivalry or competition harmful to the educational interests of these communities.

The commission recommends that if the General Assembly continues the appropriations to the Cooperative Education Association and the Congress of Parents and Teachers, such appropriations shall be expended only upon the approval of the Superintendent of Public Instruction, and only then provided he is satisfied that these organizations are not engaging in rivalry or competition harmful to the educational interests of the communities in which they are operating.

SCHOOL LAWS

The school laws have been amended at various times and there has been superimposed upon them the county unit act. This act has operated successfully and satisfactorily, and now should be written into the school laws in the place of the district provisions where appropriate. The school laws are scattered and full of inconsistencies.

The commission recommends that the school laws be codified; that in the codification, the county unit be written into the laws in place of the district where appropriate; and that the amendments recommended in this report be included in the codification.

PART II

Higher Education

INTRODUCTION

In presenting the Report on Institutions of Higher Learning, the commission is clearly aware of the many difficulties involved. Virginia is rich in the number of her institutions. Most of them are surrounded by a wealth of tradition and sentimental memories on the part of many of the citizens of the State. Most certainly, if Virginia were to establish a new system of tax-supported higher education she would not find it necessary to build so many institutions as she now has. The problem of the commission has been that of studying each institution sympathetically and striving to fit it into its special place in the wholeness of the educational program. The commission has tried to retain everything of value in the things which the State now possesses, and to discard only those things which seem to be useless or outworn. In the report of the survey staff will be found many and varied recommendations which may guide the educational leaders for the future. The commission, for the present, contents itself with definite recommendations upon matters which are imperative in their importance, leaving for the future consideration of those responsible for educational development such matters as may be impossible of realization under the limitations of the present budget. The recommendations which follow represent the best judgment of the commission in the light of the facts disclosed by the investigation of the survey staff.

THE HIGHER INSTITUTIONS OF LEARNING IN VIRGINIA

Virginia has ten separate and distinct tax-supported higher institutions of learning:

- The University of Virginia,
- The College of William and Mary,
- The Virginia Agricultural and Mechanical College and Polytechnic Institute,
- The Virginia Military Institute,
- The Medical College of Virginia,
- The State Teachers College at Radford,
- The State Teachers College at Harrisonburg,
- The State Teachers College at Fredericksburg,
- The State Teachers College at Farmville,
- The Virginia Normal and Industrial Institute.

With the exception of the teachers colleges, each institution is governed by a separate board of visitors appointed by the Governor. One board, also appointed by the Governor, serves the four teachers colleges.

The University of Virginia consists of the college of arts and sciences for men; and the department of graduate studies, the department of education, the department of engineering, the department of law and the department of medicine, all admitting both men and women.

The College of William and Mary admits both men and women to a curricula leading to the degrees of bachelor of arts, bachelor of science and master of arts.

The Virginia Polytechnic Institute, as it is generally known, consists of the department of agriculture, the department of engineering, the department of business administration and the department of applied science.

The Virginia Military Institute is a college of arts, sciences and engineering. The institute is operated on a strictly military basis.

The Medical College of Virginia consists of the department of medicine, the department of dentistry, the department of pharmacy and the department of nursing.

The four teachers colleges train white women teachers, and the Virginia Normal and Industrial Institute trains colored teachers.

Each higher institution is crowded and forced to turn away applicants every year.

ENTRANCE REQUIREMENTS

In Part I of its report the commission stressed the importance of pupil guidance and selection in the elementary and secondary schools in order that no one may gain admission to a higher institution who is not qualified to pursue successfully its curriculum. The report of the survey staff shows conclusively that there are a great many actual and potential failures among the first year students in higher institutions, due either to a lack of native ability, preparation or a desire to succeed. Such students are the product of both public and private schools. They take up room that could be occupied by students who are better prepared, and who possess the type of ability that is required for success in collegiate work.

The commission believes that a careful study of the records made by students during their school courses and of the results of educational tests, added to the judgment of the members of the faculties of the schools they attend, will eliminate those candidates for admission to the higher institutions who can more profitably spend their time elsewhere. Adoption of such a policy will not only save both State and student money, but it will also lessen the demand for the expansion of the physical plants of all institutions, and will make it possible for each institution to serve

better than it is now doing those students who are capable, on the basis of intellect and character, of doing high grade work.

The commission recommends:

That all institutions of higher learning establish a more rigid system of selecting candidates for admission.

DUPLICATIONS

As to Specialized Courses

One of the chief reasons given for the appointment of the commission was that of seeking to overcome the duplication of courses in the several institutions. The commission believes that the giving of certain basal courses, such as English, mathematics, etc., in all institutions, is essential to a sound education in any field, and, therefore, cannot legitimately be called duplication. On the other hand, it is extravagant and unwise to offer in one institution specialized courses which belong properly to another institution as a part of the field which it is especially designed to cover. This latter program is duplication and should be discontinued with the cheerful assent of all concerned.

The commission recommends:

(1) That the University of Virginia be given the field of all graduate instruction or work beyond that for the baccalaureate degrees, and that no work of graduate standing or credit be offered at any of the other State institutions. As soon as the State's finances will warrant it, the facilities for graduate instruction should be generously increased at the University so that its higher degrees in all departments shall be unexcelled by those of any other State university in America.

(2) That all liberal arts work as such should be restricted to the University of Virginia and the College of William and Mary and that no other State institution shall be permitted to invade this field.

(3) That at the Virginia Polytechnic Institute all work of the nature of liberal arts should be eliminated. Practical courses in business administration and home economics should be given only as a preparation for more efficient lives in the fields of agriculture and mechanical arts, for which professions Virginia Polytechnic Institute was established. These courses should never be expanded into major departments of instruction in competition with the University of Virginia or the College of William and Mary. The pre-professional courses for law, medicine, pharmacy and dentistry should not be given at Virginia Polytechnic Institute except as the regular courses in agriculture and mechanical arts offer these professional prerequisites. Such pre-professional courses are offered at all liberal arts colleges, both publicly

and privately supported. Virginia Polytechnic Institute should be strengthened by an intensive development in its particular field rather than by an extensive program in fields for which it was not established.

(4) That at the Medical College of Virginia all basal sciences or premedical work should be eliminated. These should be restricted to the other institutions which are already amply prepared to give excellent courses leading up to entrance to the Medical College of Virginia.

(5) That the University of Virginia and Virginia Polytechnic Institute so coordinate their engineering offerings that the quality of engineering education in Virginia may be greatly improved, and the duplication of expensive equipment required for effective instruction may be eliminated.

(6) That the higher institutions devote their resources to improving the work now being generally elected by students rather than to increasing the range of their offerings in order to become more comprehensive or complete universities. A maintenance of the high quality of instruction is preferable to a large quantity of offerings.

(7) That, in the interest of economy, all of the State institutions of higher learning study the possibility of revising their curricula so as to eliminate courses of study for which there is an unusually small demand. At the University of Virginia, Virginia Polytechnic Institute, Virginia Military Institute and the College of William and Mary combined there were given in 1926, 359 courses, showing an enrollment of less than five students each, and 271 courses showing an enrollment of between six and ten students each. The commission realizes that a number of such courses must be given in each institution in order to care for advanced students and full departmental programs, but it believes also that there are some courses which may be offered only in alternate years and others which may be offered only when there is a minimum enrollment of ten students, thus making possible some reduction in instructional costs.

As to Legal Education

The attention of the commission has been called to a possible duplication in the facilities for legal education in Virginia as a result of the establishment at William and Mary of the Wythe-Marshall School of Government and Citizenship as a memorial to the great chancellor and chief justice. The commission is reliably informed that all expense in connection with the legal courses taught in this school are defrayed from the income of a substantial endowment fund.

As long as the scope of the school is confined to the objects of the endowment and the teaching of the Constitution of the United States, its history and fundamental principles, the Commission does not feel that the continuance of the school unnecessarily duplicates the facilities of other tax-supported institutions.

As to the Virginia Military Institute

The commission believes that the most serious and expensive item of duplication in Virginia is to be found in the continued maintenance of the Virginia Military Institute at the public expense. Aside from the military features of its program, there is no educational service being rendered at Virginia Military Institute which is not already duplicated or can be more advantageously and less expensively duplicated at the other tax-supported institutions. Liberal arts courses are being given to better advantage at the University of Virginia and the College of William and Mary; the entire field of engineering can be covered, if necessary, at Virginia Polytechnic Institute. The State cannot afford to maintain three engineering schools, with a triple capital outlay or costly, up-to-date laboratories. The military training at Virginia Military Institute is too exacting and time-consuming for young men who are preparing for civilian life. The excessive number of hours given to military theory and practice impinges greatly upon the time that the student should give to real intellectual or vocational preparation for his work in life.

In view of these facts, the commission has found it a most difficult task in arriving at a recommendation. We realize the association of the Virginia Military Institute with the name of Stonewall Jackson, that great leader of the past, whose life and works would seem to set apart Virginia Military Institute forever as a shrine for the people of the South, as well as large numbers from the North. But we cannot believe that this should be done by the expensive duplication now in operation, which requires funds which could be more advantageously invested in strengthening elementary and secondary schools, blotting out illiteracy, or making more effective investment of the taxes paid by the people of Virginia for coordinated liberal scientific and professional education in the field of higher learning.

Our study of this entire problem has led us to recommend the following:

- (1) That all appropriations for scholarship aid of every kind for students at the Virginia Military Institute be discontinued, effective at the earliest possible date;
- (2) That no further appropriation for capital outlay at Virginia Military Institute be made;
- (3) That only the funds absolutely necessary for maintenance be appropriated for the next biennium;

(4) That the Governor and the board of visitors of the Virginia Military Institute confer for the purpose of negotiating with the alumni of the Virginia Military Institute, or other substantially interested persons, to the end that the institution may be taken over by them and operated privately through a legally constituted board of trustees, who shall finance the operation from tuition fees and private benefactions from persons interested in the type of education which the trustees may propose;

(5) That so long as such board of trustees shall operate the Virginia Military Institute without cost to the State of Virginia, the present physical plant and all appurtenances thereto shall be rented to said trustees for the sum of one dollar per annum, the said trustees to assume the responsibility for keeping the buildings in repair and adding to them as new needs may arise;

(6) That in case the said trustees shall ever discontinue the operation of the Virginia Military Institute as an approved institution of learning, then all present physical properties and appurtenances thereof shall revert to the State of Virginia, together with any improvements which may have been made thereon.

(7) That, in case the board of visitors should fail in finding alumni or other substantial interests who might be willing to assume the responsibility for carrying on Virginia Military Institute as a non-profit producing educational institution, then the said board of visitors shall be instructed to discontinue as speedily as possible the type of education now provided, and, in its stead, shall establish an institution providing for vocational work and preparation for professional courses as outlined at length in the several chapters of Division X of the report made by the survey staff and submitted with this report by the committee.

We attach hereto excerpts from the report of the survey staff in order that additional facts upon which these recommendations are based may be made clear.

"In 1839, in order that the arsenal established at Lexington might be most adequately protected, and in order that the young men might be given an education while protecting it, the Virginia Military Institute was established and the first corps of cadets, thirty-two young men, was mustered into the service of the State. In 1842, the military institute was given by legislative act the distinctive mission of preparing teachers for the public schools of the State. In 1860, the institute was expanded into a general scientific school, including agriculture, engineering and fine arts. Following

the War Between the States, in which the cadets and ex-cadets played a most distinguished part, the Institute assumed the role of a college of arts, sciences, and engineering, which it still maintains. Throughout its long history it has consistently retained its military character, and a most impressive list of military heroes owe their training to this institute.

"The Virginia Military Institute had in 1926-27, 724 students, of whom 305 were residents of Virginia and 419 were residents of other States and foreign countries. The staff consists of thirty-three professors of the various ranks and fifteen instructors, in addition to nine officers of the United States army who are stationed at the institute to offer instruction in the various branches of the military service.

"The Virginia Military Institute has played a very important role in the civic, political and educational life of Virginia and the entire South. Many of the most distinguished military, as well as civic leaders of Virginia and of the nation, have received their education at the institute. But the need for the particular type of education which is found at Virginia Military Institute has largely passed. The liberal arts work can be done somewhat better at the University of Virginia and the College of William and Mary, and the engineering work can be better done at the Virginia Polytechnic Institute. The military mode of life at the Virginia Military Institute affects the character of the educational work so that it is more formal, conventional and static than is needed in Virginia today. In an earlier day, when education was merely disciplinary, the Virginia Military Institute's formal educational régime was quite satisfactory; but it has already been pointed out that Virginia is in need today of a dynamic type of education which cannot be conducted most efficiently under the conditions made imperative by the military mode of organization and conduct. If the State of Virginia were adequately supporting rural, elementary and secondary and higher education of a modern type, and if it had abundant resources to meet all educational needs, neither of which is true, then it might perhaps continue to appropriate funds for the education of men at the Virginia Military Institute; but in the circumstances it is not educationally justifiable for the State to continue to make appropriations it has been making for education at Virginia Military Institute. So long as there are children in Virginia of elementary age who are growing up in illiteracy because there are not adequate provisions for their education, and so long as the State is not making adequate provision for the higher education of women, and so long as the University of Virginia, the College of William and

Mary, and the colleges for the training of teachers are inadequately supported so that they cannot perform the tasks properly falling to them, up to a reasonable standard, Virginia should not continue to appropriate funds for the maintenance of students at the Virginia Military Institute, when they can be cared for very well at other State-supported higher institutions.

"It has been shown in previous chapters of this report that Virginia is not giving adequate support to any phase of the public educational work of the State. In the circumstances, Virginia ought not to spend funds upon an institution which is not in a high degree meeting the educational needs of the State."

The above statements of the survey staff are elaborated in its printed report and the commission suggests that persons desiring a full review of this matter shall read carefully this detailed treatment of the staff.

THE TEACHERS COLLEGES

The commission has received with great satisfaction the report of the survey staff indicating the generally satisfactory work which is being done by the four teachers colleges and the colored normal institute in the field of teacher training. Their service becomes increasingly important as the demand for trained teachers grows and the ability of the State to pay trained teachers increases. Virginia is not now training a sufficient number of competent teachers for the rural schools and the elementary city schools, which lack must be overcome.

The colleges at Fredericksburg and East Radford do not have adequate facilities for practice teaching in the high school, and it does not seem wise for the State at present to provide such facilities. The University of Virginia, the College of William and Mary and the teachers colleges at Harrisonburg and Farmville are equipped to prepare all the teachers for the high schools of Virginia for the present and probably for some years to come. If Virginia establishes a college of liberal arts for women, a teacher training department should be provided for in that institution.

The commission recommends:

(1) That the colleges at East Radford and Fredericksburg devote their resources entirely to the training of teachers for rural and for elementary city schools.

(2) That all the teachers colleges shall immediately establish a one-year training course for teachers in rural schools, the work in this course to relate specifically to the needs of rural school teachers.

(3) That the minimum tuition fee of \$25.00 per quarter be charged to all students of teachers colleges who pledge

themselves to teach in the public schools of Virginia for at least two years, and that for those who do not so pledge themselves the minimum shall be \$40.00 per quarter.

(4) That the loan fund recommended in another section of this report shall be available for the use of the students of the teachers colleges upon the same terms that may be laid down for the administration of said fund in the interest of students of the other State institutions.

JUNIOR COLLEGES

The junior college movement is growing by leaps and bounds in some sections of the United States. Efforts are being made in some communities in Virginia to establish junior colleges as extensions of high school courses.

Junior colleges should not be established in this State until the rural, elementary, secondary and higher education and teacher training institutions are put on a par with the public school system in States with which Virginia wishes to keep abreast.

The commission, therefore, recommends:

That the State do not contribute to the support of junior colleges so long as the now established forms of education are failing to receive adequate financial support.

COORDINATION AMONG HIGHER INSTITUTIONS

The commission is convinced, both from its own study of the subject and from the report of survey staff, that there is urgent need of careful efforts to coordinate the work of all the institutions of higher learning into a single unified system. The commission in another part of this report recommends the elimination of certain definite and unnecessary duplication now existing. We are, however, more gravely concerned over the duplication and competition which may grow and become more and more aggravated in the future. The commission is confident that the higher institutions of learning cannot hope to continue to enjoy the confidence of the people of Virginia unless there is created some instrumentality which will be able to study their problems and to seek to adjust the activities of each institution to the educational needs of the State rather than to continue to permit them to compete with each other in a desire to expand purely for the sake of individual expansion.

After a careful study of a number of plans proposed to meet this need the commission recommends the creation of the office of chancellor of higher education. The chancellor, if created, should be charged with the responsibility of securing coordination among the higher institutions so that the scope and character of the work of each institution should be such as will be of greatest service to the State.

He should not assume the function of president or exercise control over the internal administrative work of any institution. In conjunction with the presidents and the boards of visitors of several institutions, he should work out such a program of higher education that each institution will be responsible for the type of work that it is best equipped to perform and that is most needful for the progress of the people of the whole State. He should further be charged with the duties of developing such financial plans as will assure the support of the program in each institution, but guarantee a balanced financial support to the institutions, according to the ability of the State to pay. The commission is well satisfied that the salary paid such an officer will be saved to the State and institutions many times by the exercise of the duties it is proposed to confer upon him. The duties of the chancellor should be defined in part, in the words of the survey staff, as follows:

- a. To study the needs of higher education in Virginia, and by conference and counsel with the several institutions seek to secure adjustment within those institutions such as to avoid duplication and to provide adequately for the educational needs of the State.
- b. To represent the cause of higher education in the councils of the State and before the people at large, in order that the place and function of higher education in developing the State's human and material resources may be the better comprehended.
- c. To insure uniform standards of admission so that no student not by nature, training or inclination qualified to pursue successfully a higher education will be admitted to a higher institution.
- d. To examine the budgets submitted to the Governor by the several institutions of higher education, and to indicate his recommendations to each item for the consideration of the Governor and the Director of the Budget, thus assuring the development of each institution in conformity with a single unified system of higher education in the State.

The commission recommends:

1. That a chancellor of higher education be chosen by the State Board of Education on nomination of a special committee composed as follows: The Governor of the State; the State Superintendent of Public Instruction, who shall act as chairman; one member appointed by the Board of Visitors of the University of Virginia, one by the Board of Visitors of the Polytechnic Institute, one by the Board of Visitors of the College of William and Mary, one by the Board of Visitors of the Virginia Military Institute (if continued), one by the Board of Visitors of the Medical College of Virginia, one by the Board of Visitors of the State

Teachers Colleges, and one by the Board of Visitors of the Virginia Normal and Industrial School.

2. That the budget of the office of the chancellor be approved by the State Board of Education, and the funds to meet this budget be contributed by the several institutions of higher education in the proportion in which the State appropriation to each institution bears to the total appropriations made by the State for the maintenance and operation of these institutions.

3. That the salary of the chancellor be determined by the Board of Education and be such as to insure the selection for the position of a person of high standards and abilities.

LIBERAL ARTS EDUCATION FOR WOMEN

In an earlier day it was believed in Virginia that State-supported higher education should be provided solely for men. But not until the State took over the College of William and Mary were women permitted to pursue liberal arts courses on the same basis as men. However, even at the College of William and Mary provisions are not adequate for the number of women who are seeking a liberal collegiate education. By practice, if not by statute, the proportion of women students at the college is kept below that of men—only 45 per cent of the students may be women. The commission has learned that a large number of women applicants for admission at the College of William and Mary for the session 1927-1928 were rejected because the dormitories for women had been filled. Women are not admitted to the college of liberal arts at the University of Virginia, and are not admitted at all to the Virginia Military Institute. They are admitted only to a limited range of work at the Virginia Polytechnic Institute. The commission has received requests from many distinguished women of Virginia praying that a recommendation should be made that women be admitted upon a parity with men to all the courses at the University of Virginia. From this review of the situation it can be easily discerned that Virginia historically has discriminated against women as compared with men in the matter of admission to the institutions of higher learning. Even in more recent times, when the barriers to the admission of women have been broken down in certain instances, the experiment has been accompanied by many evidences of reluctance and disapproval on the part of the alumni and other interested people.

The fact remains, however, that the present position of women in the life of Virginia makes exceedingly reasonable and just, to say nothing of desirable, that equal opportunities for higher education be given to the men and women of the State alike.

Two solutions to this problem are possible:

(1) The University of Virginia might be thrown open to the admission of women as students in all of its undergraduate and

graduate schools. This would mean vastly increased facilities which must be supplied by the State, both for increase in physical plant and also for additions to the teaching staff. It would mean essentially the giving up of Virginia's traditional allegiance to the idea of separate education of the sexes and would commit the State to the increasingly popular idea of coeducation.

(2) A separate liberal arts college might be established for the education of women in the undergraduate field of liberal arts. It might be possible to place such institution reasonably close to the University of Virginia and under the control of the same administrative personnel. This would mean a continuance of Virginia's traditional allegiance to the idea of separate education of the sexes and would mean essentially the system of coordination which is reasonably popular in many States of the Union and among many privately-supported institutions.

After a careful study of this difficult situation the commission recommends:

That the second plan be adopted and that because of its advantageous location, its excellent physical plant and its room for expansion, the State Teachers' College at Harrisonburg be converted into a liberal arts college for women co-ordinated with the University of Virginia, and that all graduate and professional courses for women be continued at Charlottesville. In order that this may be carried into effect it is recommended that the General Assembly of Virginia, as speedily as possible, devise means for making suitable appropriations to make this recommendation effective and at the same time to enlarge, as far as may be necessary, the three remaining teachers colleges so that they may be able to care for all applicants who may desire to prepare for the profession of teaching in the elementary and secondary schools of Virginia.

THE FINANCIAL SITUATION OF THE HIGHER INSTITUTIONS

Appropriations to Higher Education

Virginia has not been very generous to her higher institutions of learning. Indeed, she has been parsimonious, and much of their growth has been due to the generosity of others. In 1915 the total State appropriation to all higher institutions, including the teachers colleges, was \$733,250.00; in 1927, \$1,559,705.00, an increase in twelve years of \$826,455.00. In the same period the number of students has greatly increased, while the purchasing power of the dollar has decreased 38 per cent. The aggregate expenditures of the higher institutions in 1927, according to the staff report, were \$5,877,337.00. The difference between the amount appropriated by the State and the total expenditures is made up

by income from endowment funds, tuition fees, board and other miscellaneous items.

In 1927 the State appropriated \$5,337,084.00 to the common schools, while their total receipts from all sources approximated \$24,000,000.00. It is evident that the higher institutions are not being favored by State support to the detriment of the common school system.

The higher institutions in neighboring States receive State appropriations greatly in excess of those made by Virginia. While what other States do in this respect should not be Virginia's measure, the results are manifest, because neighboring institutions are growing and expanding at a rapid rate while Virginia institutions have barely held their own with the assistance of private munificence. Richer institutions are attracting Virginia students and Virginia teachers.

If the fame and prestige of higher education in Virginia are not to suffer, then Virginia must be more liberal in her support of higher education than she has been in the past.

Economies, Business Management and Accounting in Higher Institutions

The survey staff was unable to give a satisfactory answer to the commission's request to ascertain the actual cost of education per pupil in the several institutions and in the several departments of each institution, because of the varying methods of accounting and the absence of satisfactory analyses of receipts and disbursements. Such information is essential both for economic operation and for determining an equitable basis for charges made to students.

The absence of the same information has prevented the commission from suggesting economies which sounder and uniform accounting methods will undoubtedly disclose. However, all of the institutions have been so pressed for funds that there has been little room for extravagance in operation and maintenance.

There is an absence, in some institutions, of centralized responsibility for business details without which many economies will pass unnoticed. When it is possible through uniform accounting methods to compare intra and inter-institutional costs, additional economies will become apparent.

The centralized accounting under the State Comptroller required by the reorganization act will make for uniform accounting as to State appropriations, but not for all funds; nor will receipts and expenditures be so segregated as to make possible accurate analyses. For information and comparison, all departmental costs should be calculated in a uniform way.

Institutional rivalry and duplication, as set forth in another section of this report, are responsible for the largest items of avoidable

expense. An illustration of rivalry is found in the annual advertising expenditures of the higher institutions, part of which can certainly be attributed to institutional competition, and all of which should be promptly eliminated by institutions which cannot now take care of the students who apply for admittance. The aggregate amount expended on advertising during the year ending June 30, 1927, as reported to the commission, exceeded twelve thousand dollars.

While the chancellor, recommended in another section of this report, should not, if the office is created, interfere with the internal affairs of the higher institutions, it should be one of his duties to coordinate and modernize their business practices and recommend economies both in maintenance and capital outlay.

The commission recommends:

1. That each institution centralize its business management in one person.
2. That each institution, in conjunction with the office of State Comptroller, install the same modern system of accounting, with receipts and expenditures so segregated as to present an itemized record of all items of income, as well as an accurate analyses of costs.
3. That the institutions cease advertising expenditures in the sense the term is generally used.

Endowment Funds

Most of the State institutions benefit from endowments secured from private sources. While such funds are properly administered by the officers of the institutions, they should be reported to the State, both as to capital and income, in a uniform way in all the institutions.

Tuition Fees

In 1818 Thomas Jefferson, the father of public education in Virginia, wrote to Joseph C. Cabell:

“A system of general instruction, which shall reach every description of our citizens, from the richest to the poorest, as it was the earliest, so will it be the latest of all the public concerns, in which I shall permit myself to take an interest. Nor am I tenacious of the form in which it shall be introduced. Be that what it may, our descendants will be as wise as we are, and will know how to amend and amend it, until it shall suit their circumstances.”

Jefferson believed the State should provide free education in the elementary grades, *but limited free education in the higher grades to students of the “most promising genius whose parents are too poor to give them further education.”*

The State of Virginia has long since departed far from Jefferson's beliefs, and tuition fees proper have been for years and are now wholly absent or of negligible amounts in all Virginia institutions, irrespective of the financial condition of the student or his mental powers.

But the institutions, in lieu of tuition fees, charge Virginia students varying sums to cover sundry services, such as the cost of matriculation, maintenance, library, etc. There is no uniformity in the items making up these charges, although the aggregate is approximately the same in all institutions. This practice amounts to a holding out of free education with one hand, and taking it back with the other. The son of poor parents pays as much as the scion of the rich. No distinction is made between ignorance and genius.

The increased demand for education in all its forms has, in recent years, far outstripped the financial ability of the State to provide. The time has arrived to exercise the confidence Jefferson reposed in the people and amend the present policy as respects the cost of education, and determine anew the limit of the State's responsibility.

The commission believes that the first duty of the State is to the elementary school, which is intended to lay the foundations in the lives of all the children. To give free higher education to a comparatively small number of its people at the cost of inadequate elementary education for the masses would, in the judgment of the commission, be a program of folly and an invasion of the ideals of democracy. The commission is of the opinion that the finances of the State warrant the development of a thoroughly adequate system of elementary and secondary education which shall be free to all without distinction of either sex or locality. Beyond that we believe that, in view of the fact that higher and professional education increases the earning power of the recipient throughout his life, and in a measure represents a dividend paying investment of capital, it is, therefore, only just that a considerable portion of the cost of such education should be borne by the person receiving such individual benefits. The State should not seek to evade its responsibility for training its youth in good citizenship and intelligent leadership in all forms of life in Virginia; rather do the circumstances indicate that the State and the individual should cooperate in bearing the burden which neither is financially able to bear alone. Therefore, if the State can supply the capital outlay for buildings and other material equipment and a decreasing amount of maintenance costs, can it not be fairly supposed that the student should bear a reasonably large pro rata, and in time all of the actual cost of the operation of the plant during the years in which he is there registered for study? This view is rapidly commending itself to educational leaders, publicists and philanthropists in America, many of whom have spoken and written in its support. Only by such an

alliance of the State with the student does it appear that we can offer higher and professional education in Virginia upon a continuing plane of unchallenged excellence.

The bare salary cost for tuition is conservatively estimated to average \$200 per student year in Virginia institutions of higher education. This sum does not include maintenance and other proper charges that enter into the cost of education.

The commission recommends:

(1) That in the University of Virginia, the College of William and Mary, the Virginia Polytechnic Institute and the Virginia Military Institute (if continued), the minimum tuition fee for a session of undergraduate work shall be, for the present, \$150.00, except as affects the departments of education which may now or hereafter be authorized for the training of teachers for the public school system of Virginia. This minimum shall apply only to students who are residents of Virginia, and students who are not residents of Virginia should be required to pay as tuition such sums as may more closely approximate the actual operating cost per student for the institution involved.

(2) That the chancellor of higher education, if appointed, make a careful study of the several institutions above named with reference to the ratio of tuition income received from students to operating costs and that upon the basis of such study tuition charges shall gradually be adjusted to the end that the beneficiary of such education shall bear a fair share of the cost of what he receives.

(3) That in harmony with this policy of the beneficiary's sharing his educational cost with the State, all State scholarships of every kind and character be abolished in each of the State institutions.

Loan Funds

As a democratic substitute for the present undemocratic system of so-called free tuition and allocation of State scholarships to poor and rich alike, and in order that students with limited financial resources, not necessarily "of the most promising genius," but mentally qualified to pursue successfully courses in the higher institutions, may have the advantages of such courses, loan funds should be readily available. The commission cannot conceive of a more democratic application of Jefferson's principles than that those students who can now share with the State the cost of higher education do so, and that those who cannot, return this cost to the State when their earnings make it possible. Limited loan funds, separately administered, are now available. The commission is informed that the losses on loans to needy students are almost negligible. A centralization of administration of all loan funds

will insure uniform requirements and additional safety. Loans should be made only to such students who can produce satisfactory evidence of need, character and scholarship.

The commission recommends:

That a revolving loan fund be established by the State, under the direction of the Governor, to be administered under regulations to be by him hereafter determined.

Salaries

The commission is satisfied both from the report of the survey staff and its own observations that the salaries now paid in many of the institutions will not suffice either to retain or attract teaching personnel of high character and ability. While the commission does not approve a horizontal increase in all salaries, it unhesitatingly recommends:

That the executives and boards of visitors of the several institutions make such increases in salaries as funds will permit and as will insure the maintenance of that high standard of scholarship for which Virginia institutions are so justly famed.

FUTURE NEEDS OF THE HIGHER INSTITUTIONS

In the report of the survey staff will be found a listing of the present and future needs of Virginia's institutions of higher learning. The commission believes that it would be unwarranted in recommending the meeting of these needs beyond the amounts contemplated in the Budget for the next biennium. Such needs are always in flux and change from time to time by reason of the development of modern methods and new ideas of educational service. The commission is unable to determine the priority of the many items which would greatly enhance the effectiveness of the several institutions. It can only call the list to the attention of the Governor of the State, the members of the General Assembly, and the executive officers of the institutions themselves, in the hope that together they may devise a cumulative program which will enable the tax-supported colleges and university to improve their situation as rapidly as funds can be made available.

CONCLUSION

In conclusion, the commission recommends that every educator in the State make a thorough study of the survey staff report in order that he or she may become fully conversant with the educational situation in Virginia and the recommendations made by the staff.

